

Learning at Mudd: Insight into the student academic experience

[1] Motivation for this report

The 2014-2015 Teaching and Learning Committee [Hawkins, Orrison, Sweedyk, Boerkel, Palucki-Blake, Hodas] spent time discussing our respective classroom environments, with special attention to the frequent low energy of some of our students spanning much of the semester. The TLC wondered about the impact that our challenging curriculum, especially during the first two years, has on individual classroom interactions and learning. These discussions included ways the HMC honor code is or is not working for our students and whether the reported increase in honor code violations might be related to the pressure created by such a demanding curriculum.

TLC faculty noticed that *student impression* of their own academic ability, knowledge, and performance is often lower than reality, and that this pervasive feeling of being “less-than” impairs their engagement in class and their enthusiasm for tackling the interesting, and often challenging, problems we know they can handle.

We asked ourselves, “What can the TLC do, both as faculty themselves and for the larger HMC community, to support a true sense of achievement among students? What can the TLC learn from talking with students and faculty about issues related to the student academic experience, in particular (1) the challenging curriculum and (2) the Honor Code?”

[2] What TLC did

The committee felt that an outside voice may offer important insights that might have been missed or insufficiently prioritized. The TLC approached Dr. Charlie Blaich and Kathy Wise, MBA director and assistant director for the Center of Inquiry into the Liberal Arts at Wabash College, respectively, and requested a site visit with student and faculty focus groups. The Center for Inquiry of Liberal Arts is dedicated to helping colleges and universities use evidence to strengthen liberal arts education for all students. Blaich and Wise have visited more than 150 colleges and universities, working to support the missions and students of the institutions with which they collaborate. More information on the center and their core values can be found here:

<http://www.liberalarts.wabash.edu/> and the biographies of the consultants are available by request to our director of institutional research (lpblake@g.hmc.edu).

We asked Blaich and Wise to:

“Review and recommend strategies for the Teaching and Learning Committee (TLC) as we plan future work with faculty in supporting our students in two specific ways: (1) upholding the Honor Code and (2) appreciating their own growth and success in a challenging curriculum.”

The visit took place in October of 2015 under the purview of the 2015-2016 TLC [Hawkins, Boerkel, Eckert, Karp, Hur, Srebotnjak, Palucki-Blake, Hodas]. The

consultants were provided survey data (e.g. CIRP Freshmen Survey, CIRP Senior Survey, NSSE). Blaich and Wise met with 24 students in small groups of 2-8 and 31 faculty (again in small groups of 3-8) over a period of two days.

[3] Who was involved?

A two-pronged strategy was used to invite both students and faculty. First, we sought to invite faculty and staff with specific administrative responsibilities germane to the topics (Deans, Associate Deans, VP, members of the TLC and Honor Code working group). Of those, all but one was able to attend at least one conversation with the consultants (14 faculty).

Additionally, to attempt broad and adequate representation, faculty members were invited to participate in conversations using a stratified random sample to ensure that all departments, ranks, and genders were represented. Of the 31 faculty members invited through the stratified random sample, 17 participated (55%) in at least one conversation with the consultants.

We followed the same method for students. Targeted student groups included ASHMC, the Honor Board, and members of the work-life balance group. In addition to the student groups mentioned, the TLC invited a random sample of 40 students from each class year to meet with the consultants. Because the response rate to this general invitation was low among the randomly selected students (1%), after conferring with the consultants, the TLC extended the same invitation to students enrolled in weekly wellness groups to participate. TLC members also reached out to their first year advisees and Core lab students.

It is important to point out that the students who opted in to the discussions may or may not represent the typical student experience. The consultants were brought in to help us understand the nature of two specific issues and what might be underlying and intertwining them.

[4] The outcome

Blaich and Wise provided a detailed report of their conversations as well as their own reflections and general recommendations to the TLC. It is this detailed report that we are providing here. While the report was intended for the TLC, we felt that this report may inform upcoming discussions within the newly reinstated Honor Code Working Group and the Core Curriculum Working Group and that all faculty members should have access to this report.

FEC is hosting a round table discussion on this report and related issues during the special faculty meeting time on March 10. Members of TLC will join the tables. The TLC is interested in targeting future programming (Talking Teaching Lunches, for example) in response to faculty conversations during this round table discussion.

To: The members of the Harvey Mudd Teaching and Learning Committee
From: Charlie Blaich and Kathy Wise
RE: November visit to Harvey Mudd College
Date: 2/1/16

Summary

At the request of Harvey Mudd's Teaching and Learning Committee (TLC), we visited Harvey Mudd in early November 2015 to speak with students, staff, and faculty and identify strategies that would aid the TLC's efforts to help Harvey Mudd students (1) uphold the Honor Code and (2) appreciate their own growth and success in a challenging curriculum. The following themes emerged from our conversations:

- We were pleased to hear how often students talked about Harvey Mudd's unique mission as a liberal arts college that focuses on mathematics, the physical and biological sciences, and engineering but aims to more broadly educate her students. Many students said that they came to Mudd because they loved learning about science, but they saw themselves as having talents, skills, and commitments beyond the sciences that they wanted to develop or express, and they saw Harvey Mudd as a place that would allow them to do "both-and" rather than choose one over the other.
- All of the students we spoke with were committed to Mudd, appreciated the education they were getting there, and felt they were part of the Mudd community. Even though they made positive comments about the college, their peers, and many of the faculty, they also often and consistently talked about the negative impact of Mudd's workload on their growth and development. Students often framed their out-of-classroom work in terms of focusing on getting done what was due the next day, with little time for thinking about longer-term assignments, especially the kinds of assignments that required reflection.
- The workload led many students to focus on content in their technical courses to the exclusion of the kinds of broader, more liberal arts pursuits both in and outside of the classroom. A number of students spoke eloquently about how they consciously gave up on the hope that had brought them to Mudd – the opportunity to get a challenging education in the sciences while also exploring other disciplines and interests outside of the sciences. And the students we spoke with saw this concession as their failure.
- While most faculty were aware of students' struggles, there was a divide among the faculty in how they wanted to work with students who were struggling. Some faculty were sympathetic, worked to help students deal with the challenges, and thought that Harvey Mudd needs to change to give students a little breathing room. These faculty checked in on students and ask how they were doing, were more flexible about deadlines, shared how they struggled with their workload, and encouraged students to ask questions. They helped students to continue working hard without feeling like failures because they were struggling. As one student said, these faculty "empowered learning."
- However, a significant number of faculty thought that Harvey Mudd students had, over time, become less capable of, and less interested in, meeting the challenge of Mudd's difficult curriculum. While it is not unusual for us to hear faculty lament "the decline in the quality of students," what was unusual, in our experience, was that many students had heard and felt this sentiment from some of their faculty.
- The students had also heard that they weren't as good as Mudd students in the past because there are more women and underrepresented ethnic minorities at Mudd now. While some students brushed off these comments, others either resented them or took them to heart.

- This divide among faculty about whether Mudd students today are less qualified for Mudd than students in the past was also evident in discussions about the Honor Code. Some faculty argued that students didn't have time to reflect on and take in the deeper implications of the Honor Code because they had too much work. Other faculty believed that the increase in Honor Code violations stemmed from students' inability to meet Mudd's challenging curriculum and their willingness to take shortcuts to achieve desired results.
- Students and faculty also understood the purpose of the Honor Code from different perspectives. Faculty viewed it as a way of teaching personal and professional integrity, while students largely saw it as a social compact among members of the Mudd community to be good to one another.
- There appears to be a strong competition among technical departments to occupy as much of students' time as they can. This leads to a "ratcheting effect toward a zero-sum game" in which any increase in the workload of one department comes at the expense of the amount of time students can spend working on assignments from other departments. From the standpoint of the curriculum, the HSA courses lose in this competition—yet these are the very courses that are supposed to help Mudd be more than just a technical institution.
- In our view, for Harvey Mudd to fulfill its mission as a liberal arts engineering, science, and mathematics college, the curriculum has to be revised to create more time for students to work on reflective projects, consider the deeper content of disciplines outside of their technical courses, and engage more fully in the residential life of the college. Likewise, for the Honor Code to reach its full potential as a teaching tool, the Harvey Mudd faculty will have to create space and structures that allow students to reflect on and discuss the deeper purposes behind the Honor Code. If they do consider revising the curriculum, we hope that Harvey Mudd faculty think of deep student engagement as a limited resource—an intellectual commons, like common grazing land—that has to be shared among all of the departments if Harvey Mudd is to fully meet its unique and important mission. And a commons like this will wither if departments think of work in their discipline as the most important work that students have to do.

Introduction

We appreciated the chance to visit Harvey Mudd College on November 2–4, 2015 and talk with 24 students and 32 faculty and staff. The open, heartfelt, and sometimes difficult conversations displayed a passion for Harvey Mudd, both as it is and for what it could be. We are grateful for the time that people took to speak with us.

In this memo, we summarize the themes we heard during our conversations, and we reflect on how these themes connect with our understanding of Harvey Mudd’s curriculum and mission as well as the questions that Mudd’s Teaching and Learning Committee (TLC) asked us to address during our visit. We include quotes and paraphrases in this memo so that you can hear what we heard from students, faculty, and staff in their own words. We did not record our conversations during the visit, but instead took detailed notes from which we have pulled the quotes and paraphrases. While we have marked the comments from our conversations as quotations in this report, they do not all reflect what we heard verbatim. We are, however, confident that any paraphrases accurately capture the ideas and sentiments that students, faculty, and staff discussed.

We were excited to visit Harvey Mudd College. We have worked with other technical colleges, as well as STEM departments at larger universities, but we have never worked with an institution that so clearly connects science and other liberal arts disciplines to a student’s responsibilities after college. According to its mission,

Harvey Mudd College seeks to educate engineers, scientists, and mathematicians well versed in all of these areas and in the humanities and the social sciences so that they may assume leadership in their fields with a clear understanding of the impact of their work on society.¹

On its website, Harvey Mudd identifies itself as a liberal arts college. “We’re one of the premier engineering, science and mathematics colleges in the United States. We’re also unique because we are a liberal arts college.” In making this claim, Harvey Mudd adopts the classic liberal arts focus on providing students a broad education, including powerful out-of-classroom experiences:

Aren’t engineering, science and mathematics mutually exclusive of the liberal arts? Maybe at some places, but not at Harvey Mudd . . . Mudd offers nine engineering, science and mathematics-based majors, all grounded in a solid core curriculum that includes a healthy dose of humanities and social science courses. Why? Because we know that you don’t have to sacrifice your interest in music or art (or anything else) to be good scientists. And because an understanding of history and politics will make us more effective engineers, chemists, lawyers, doctors and human beings. Add to that all of the hands-on experience we get through our high-level research projects and through our world-renowned Clinic Program, and we fearless Mudders go into the world ready for anything.

Not that Mudd’s all academics. We’re people, too. Longboards get us around campus, the Honor Code gives us freedom and responsibility, pranks keep us laughing, and parties

¹ <https://www.hmc.edu/about-hmc/mission-vision/>

make us famous. So not only do we know how to get things done, we know how to have a good time.²

Over the last 14 years, we have enjoyed the opportunity to examine liberal arts colleges in the Center of Inquiry's research,³ and the claims that Harvey Mudd makes about blending challenging work in academic disciplines, opportunities to integrate and make connections across disciplines in the arts and sciences, hands-on work, rich out-of-classroom experiences, and a dedication to developing students' broader purposes and commitments are all consistent with what accounts for the effectiveness of liberal arts colleges.

For our visit, the Harvey Mudd Teaching and Learning Committee asked us to "review and recommend strategies for the TLC as we plan future work with faculty in supporting our students in two specific ways: (1) upholding the Honor Code and (2) appreciating their own growth and success in a challenging curriculum."⁴ After reviewing our notes and reflecting on what we heard during our visit, we decided that reviewing the second part of our charge would set the context for addressing the first part of our charge, and this is the order we follow in this memo.

Do Harvey Mudd students appreciate their own growth and success in a challenging curriculum?

We spoke with the members of the TLC in summer 2015 to prepare for our visit. During our conversation about this part of the committee's charge, we heard something that puzzled us more than the official charge. We heard, "Mudd students don't seem to realize how good they are, and they don't seem to take joy in their successes at Mudd." In our work with over a hundred colleges and universities, we have never been asked to address a concern like this before. However, now that we have visited Harvey Mudd and talked with Mudd students, we see the concern as important and completely on target. Indeed, our conversations with students, and some faculty and staff, were among the most emotionally powerful and, too often, sad that we've ever had visiting an institution. We'll start by reviewing what we heard from students and then reflect on what we heard from faculty.

Students' discussion about their workload at Harvey Mudd

We were taken aback in many of our conversations with Harvey Mudd students about their academic workload. Students reported that their workload was challenging and, more importantly, unending. The workload didn't sound like it was the result of one or two exceptionally difficult courses, or one or two especially demanding faculty, but instead consisted of lots of work from almost all of their courses. Students' conversations often focused on their struggles to come to grips with their inability to juggle the workload so that they could give their best performance in all of their classes. Throughout our conversations we heard a kind of "focus-only-on-what's-due-tomorrow" tunnel vision that students adopted to survive. On its own, the focus was admirable, and certainly useful to develop as a skill for

² <https://www.hmc.edu/about-hmc/>

³ For example:

- Pascarella, E. T., Cruce, T. M., Wolniak, G. C., & Blaich, C. F. (2004). Do liberal arts colleges really foster good practices in undergraduate education? *Journal of College Student Development*, 45, 67–84.
- Pascarella, E. T., Cruce, T. M., Wolniak, G. C., & Blaich, C. F. (2005). Liberal arts colleges and liberal arts education: New evidence on impacts. *ASHE Higher Education Report*, 31.
- Seifert, T. A., Salisbury, M., Pascarella, E. T., Blaich, C.F. (2010). Liberal arts colleges and good practices in undergraduate education: Additional evidence. *Journal of College Student Development*, 51, 1–22.
- Pascarella, E. T., Wang, J., Trolian, T. L., & Blaich, C. (2013). How the instructional and learning environments of liberal arts colleges enhance cognitive development. *Higher Education*, 66(5), 569–583.

⁴ From the document "TLC Wabash Visit Schedule_2015"

emergency situations, but it's not a strategy that is conducive to the kind of broad educational goals that Mudd describes for itself.

Student comments about their workload

- “One of the struggles when I came to Mudd was to learn how to study and time management.”
- “I realized there would be more flexibility in college, but it was much harder than I thought it would be.”
- “You’re always thinking, ‘What’s the next thing to do?’”
- “I have no extra time for anything really.”
- “I know I’m not procrastinating because I don’t have the time. I worry that my shower takes too long.”
- “I want to have time to go to the store, buy food, get a haircut, do laundry, but I can’t because anytime I spend doing that is time I’m spending not doing homework.”
- “Usually I stop when everything is done for the next day, but there’s always more stuff to do.”
- “The first semester is hard but doable. It’s not as bad because it is pass/fail. The second semester is horrible. I was working so much, and I don’t remember anything.”
- “There’s always this ‘Sunday scare’ as you look out at the week ahead.”
- “I ask myself, ‘Am I mostly done, do I mostly understand?’ If so, then it’s time to move on.”
- “If you get sick or you have mental health problems, everything goes out the window.”
- “Every time I choose to sleep eight hours or go for a run in the morning, I’m very aware that that’s coming from my work on a problem set. There’s just not enough time in the day.”
- “The presentation during orientation that talked about workload said that you ended up with two extra hours a day. And if you want to chat with a friend or go to a diversity workshop, you lose those hours.”
- “I felt like I was being clubbed in the head by problem sets.”
- “I feel like I’m lying to prospective students sometimes. I feel like I should say, ‘Sometimes everything will come crashing down on your head, and you will hate it.’”
- “The Core is just like living day-to-day.”
- “Getting work done at Mudd is a triage system. It’s like living paycheck to paycheck. You’re doing all of the problem sets, the things you need to get done every day, and then a big paper or an exam comes or you get sick and it’s a car crash.”
- “I do genuinely love being at Mudd. And when I can take a step back, I realize this. But being here is a grind. It’s never-ending. The ‘living paycheck to paycheck’ analogy is perfect.”

What impact does the struggle with Harvey Mudd’s demanding workload have on students’ sense of their own growth and success?

The most consistent theme we heard in our conversations with students about how they responded to their workload was what they had to give up to do okay. It’s important to unpack this theme into its two parts: “giving up things” and “doing okay.” Almost all of the students talked about what they had sacrificed to stay at Mudd. Sometimes it was talking with friends, exercising, or taking care of personal things, and other times it was “giving up pieces of themselves,” including giving up a chance to practice their faith, their interest in things outside of science, volunteering for community service, playing an instrument, playing sports, or as some of them put it, giving up “some part of their identity.”

The second part of the theme was “doing okay.” In a number of our conversations with faculty, they pointed out that Harvey Mudd students were used to being among the best students in their high schools,

and they talked about how difficult the transition is for students to suddenly be only average or even below average at Harvey Mudd. We agree that this must be a challenging transition. And it may, in part, be why so many students talked about not competing with other Mudd students, only with themselves. But we think this misses some of what is so challenging for Harvey Mudd students. We don't think students are challenged by the idea that they aren't better than other students at Mudd. We think that they are challenged by the knowledge that they could do so much better in many of their classes if only they had the time. But for many students, the sum total of the work across their classes means that focusing on one or two classes for too long will hurt their performance in their other classes. Many of the students we spoke to had compromised and chosen middling grades for most of their courses rather than high grades in some and very low grades in others. In light of these conversations, the observation that we heard in our first phone call with Mudd's Teaching and Learning Committee makes sense. They said, "Mudd students don't seem to realize how good they are, and they don't seem to take joy in their successes at Mudd." For many of the students we talked to, "success" meant making it through by giving up the idea that they could excel in their courses and accepting "good enough," but at the same time believing that they could have excelled in most of their courses if they just had more time. In essence, Mudd students are constantly confronted with problem sets, exams, labs, and projects in which they won't be able to perform as well as they could.

Student comments about the impact of their workload

- "Classes are so hard; I feel like I accomplished nothing."
- "I'm barely keeping up with my courses; I'm not good enough."
- "You need to teach yourself that it's okay not to do your best to get everything done. And it's very hard to do this."
- "High school doesn't prepare you to fail. Your identity is tied to being smart and doing well. The transition at Mudd is hard."
- "I feel like I'm constantly behind. I know this isn't all Mudd. These are also expectations I put on myself."
- "I couldn't spare the brainpower to actually learn what I was doing in the Core. I was just trying to get through it."
- "The trial by fire here takes the whole four years. You don't feel like you master it until after you leave. I hear from alums that work requires less time than Mudd does."
- "I forgot that I loved my major for a little. I'm so frustrated. How can it still be good when I'm having so much trouble? I need to remember that it's beautiful and that learning can be fun."
- "I didn't work this weekend, and I feel happier about where I am. But I am so screwed for this week. I feel so much guilt. I was so unproductive. I should've done more homework."
- "I felt guilty about signing up to tutor someone. I wished I hadn't signed up because then I would have more hours for homework. But when I actually go and am doing the tutoring, I'm happy and remember why I signed up for it."
- "It feels horrible when I can't take care of myself or my friends because I have so much to do."
- "Do I help a friend or do I get an hour of sleep?"
- "There's this cycle of needing to do more, and more, and more. It never ends. If I'd done more, maybe this week wouldn't have been so bad."
- "I thought that Harvey Mudd would be the best place ever. I had a real passion for using technology for social good. But everything is so compartmentalized—it's hard to see how this work does any good. I felt like a robot; I wished I was a robot because it would help me get through all of the work."

- “You’re surrounded by so many talented and smart people that you lose sight of your talents and wonder, ‘Am I doing enough?’”
- “If we want to change things and get a better work–life balance, the students will have to fight for it. And the irony is that we don’t have the time.”
- “Mudd is intrinsically time-consuming. I don’t have time for many things I used to like, like reading for fun. You need to prioritize or choose what you want to do. I tried rugby, but I gave that up because I didn’t have the time.”
- “I feel guilty if I don’t join any clubs. I know I don’t have the time, but I feel like I should do things outside of class.”
- “I’ve learned to take breaks, but I feel like I’m not getting the most out of college because of this. Faith plays a big role in my life, and resting on the Sabbath is part of the equation. But this makes me feel somewhat inferior. And I find myself wondering whether I should’ve made the choice to go to services or whether I should be working.”
- “When I do nonacademic things that aren’t valued by Mudd, I need to remind myself that these things are important to me. And it’s very hard to do.”
- “There was a moment when I said, ‘Wait, would I recommend Mudd to other people?’ and I realized I couldn’t answer that question, and it was really hard for me to realize this.”
- “Mudd breaks down your identity as a smart kid, but it doesn’t give you a lot of space to explore other areas of you.”
- “I had to abandon part of my identity to get through the workload. And these things are part of what makes you you.”
- “You learn a lot here, but at what cost? You burn off a lot of material, parts of you, and what gets lost?”
- “At some point over your career at Mudd, everyone becomes a shell of themselves.”

One thing that some of the students gave up on was the liberal arts. As they focused on getting things done in their science courses, a number of the students we spoke with said their work in courses outside of the sciences came second, and it was something they could work on after they finished their work in their tech courses.

- “Students here focus on their tech courses first. There’s a pervasive idea that Hum courses aren’t as hard or important. I wish HSA courses had the same structure, and were treated with the same respect, as other courses.”
- “The humanities get downplayed. They seem easier, they’re graded easier, and you can take them at other schools in the consortium.”
- “Impact on society is part of the college’s mission, but it’s divorced from your experience in the classroom.”
- “You cope with the workload by taking humanities classes. This means that they’re given less respect. Three techs and two humanities are okay; four techs and one humanities are very hard.”
- “The humanities wind up being a checklist.”

Students talked about squeezing in HSA courses when they could, given the tech courses they needed to take to explore potential majors, fulfill the requirements for their majors, or “keep their options open.” One student we spoke to said that she was taking four-and-a-half Hum courses in the first semester of her senior year because she couldn’t get into them earlier. Students reported enjoying their HSA courses, but our sense was that they either didn’t have the time to fully engage those courses or didn’t understand that

thinking about philosophy or art requires a different approach than completing a problem set. As one HSA faculty member put it, “How can you fit five-and-a-half courses in and read *Beowulf* well?”

We understand that students, like everyone else, will have to make hard choices in order to pursue excellence. We also understand that college is a place where they should develop their ability to make such choices. But as we’ve read through students’ comments to prepare this report and reflected on our interviews, we keep coming back to how Harvey Mudd describes its unique place among the premier engineering, science, and mathematics colleges in the United States:

Aren’t engineering, science and mathematics mutually exclusive of the liberal arts? Maybe at some places, but not at Harvey Mudd . . . Mudd offers nine engineering, science and mathematics-based majors, all grounded in a solid core curriculum that includes a healthy dose of humanities and social science courses. Why? Because we know that you don’t have to sacrifice your interest in music or art (or anything else) to be good scientists.⁵

Our sense is that for many of the students with whom we spoke Harvey Mudd is not living up to this promise.

Faculty perceptions of students’ workload and its impact on their development

Faculty were divided in their comments about whether and how well students were dealing with their workload. Some acknowledged and were concerned about their students’ struggles and talked about times in and out of class when they tried to help students cope.

Faculty comments about student workload and its impact

- “Mudd has an oppressive curriculum.”
- “‘Happy’ is not a common way of describing Mudd students.”
- “When they graduate, there are a good chunk of Mudd students who aren’t sure if they would do it again. It’s a hard question for them, and they struggle with this.”
- “There are no role models for students here. HMC seniors are burnt-out. They’re not inspiring students to develop good habits.”
- “All students can do physics here. They just can’t do it with all the other things they have to do.”
- “Play is not an institutional value here.”
- “Students don’t have time to reflect or relax. Breaks are not a good thing. I asked one student who was struggling if I could walk him over to the Queer Resource Center and he said, ‘No, that’s 20 minutes that I need to use to focus on a problem set.’”
- “Students are stretched so thin that if any little thing goes wrong, it all blows up.”

Students noted a number of positive things that some faculty did to help them adjust to Mudd, deal with the workload, and learn. In particular, students noted faculty who were supportive, available, or who admitted that they had struggled with the same concepts that students were struggling with.

⁵ <https://www.hmc.edu/about-hmc/>

Student comments about supportive things that faculty do

- “Faculty in Department X are so accessible—there are lots of places to go to get help, and they check in on you.”
- “My best faculty are really clear about how they’re going to grade.”
- “Some faculty are more understanding about the workload than others, and they give extensions. Of course, that just makes the work pile up.”
- “I appreciate faculty who tell me when they’re struggling too. It tells me that I’m not a failure if I’m struggling.”
- “I chose a faculty member as an advisor because he’s open about his life.”
- “I appreciate faculty who are accessible. I emailed one professor at 10:00 p.m. and he responded right away. I’d never had a professor respond on the same day before that. This professor also had office hours every day.”
- “There’s a difference between being really knowledgeable/enthusiastic and being able to teach something to other people.”
- “The best faculty let me know that it’s okay to make a mistake—they create an open and welcoming space.”
- “The best faculty are available—if I can’t make office hours because of another class, I appreciate it when I can talk to faculty and get help.”
- “I really appreciate faculty that are invested in me and ask about me and my life. But that’s too much to expect from everyone.”
- “One professor I had was great at empowering learning. Anytime a student asked a question (even if we’d gone over this information the week before), he’d say, ‘That’s a great question, it’s fundamental and will help you learn.’ No matter what level you’re at, he’s like, ‘Good, you’re making an effort.’”
- “Professor X is a great teacher. She helped me learn how academia works, not just things at Mudd. She’s encouraging and helps me see that people really do care.”

But a number of faculty thought that the concerns about student workload were exaggerated or emblematic of deeper issues in how Mudd’s student body was changing. One faculty member argued that most students weren’t really struggling with their workloads, but that they were being misled into believing that they were struggling by some faculty and other weaker students who were raising questions about the workload. Other faculty argued that Mudd’s current students are less prepared academically and emotionally for the college’s challenging environment than students in the past.

Faculty comments about changes in Mudd students

- “There’s a question about ability vs. motivation. The demographics of our students have changed over time. I feel like our students are not as sold on a discipline in college. They come here and say, ‘I’ll do what they tell me.’ They’re not interested in science body and soul, and they don’t want to immerse themselves.”
- “I spend a lot more time and energy trying to make it interesting for students.”
- “Students are different today. They don’t know how to fail; they’re coddled. Students are wedded to their phones.”
- “I had to lower my standards to teach here. Students don’t know things that they should have learned in high school.”

- “We’ve had admissions changes and no one has helped faculty understand how to deal with a more diverse student population. We get students with perfect ACT math scores who can’t pass our math placement tests. Because of the increased student diversity, students need more help.”
- “Faculty are frustrated that students come to Mudd and don’t know the math that faculty think they should. Faculty say, ‘This is not the job I signed up for.’”

It’s hard for us to square comments about the decline in the quality of Mudd’s students with Mudd’s admissions profile and the many impressive conversations we had with students. We understand that the skills and dispositions of students have changed. One of us started teaching college students over 30 years ago, and given what we’ve both experienced, we have no doubt that Mudd students today are different in some ways than Mudd students in the 1980s, and that those students were different in some ways from Mudd’s first students in the 1950s. From an educational standpoint, we think that the question isn’t whether the students we teach change from generation to generation, but how we understand and respond to these changes.

Some faculty understood these changes as something that called on them to work in different ways to get the most out of Mudd’s talented students in order to “help all students succeed.” For some faculty the changes were positive. As one faculty member said, “We’re seeing large diversity in the preparation of our student body. Many of our students aren’t from prep schools anymore. They’re just as capable as our former students, but it may take them longer to do things.” Another added, “Of course we have a different student body now. It’s always been changing and always will. We have to adapt.”

Unfortunately, for a number of faculty, their comments about the challenges they faced in the classroom, or the challenges to the Honor Code, focused on a decline in the quality of students rather than on how they were developing their teaching skills and demeanor so that they could continue to be effective in the face of a talented but evolving student body. As we heard these and other conversations, we wondered whether we were hearing something akin to the “I hate Congress, but my representative is great!” thinking that is prevalent in national politics. When some faculty spoke about Mudd students *in general*, they talked about declines in their students’ abilities, knowledge, and aptitude. But when they talked about particular Mudd students, even those who had struggled, they spoke with more generosity.

The difficulty is that students hear these negative comments not only from faculty but also from alumni. Many of the students we spoke to had heard the “Mudd-is-on-the-decline” story, and some students also referred to moments when faculty had said or done things that made them feel stupid or question whether they belonged at Harvey Mudd. Our sense is that these comments and behaviors came from a small subset of faculty, but unfortunately, many students were aware of or had experienced them. In one of the more heartbreaking moments of our visit, a female student of color agreed with the “We did it, why can’t you?” comments she’d heard from alumni saying, “But Mudd is adding women and trying to diversify. The Core is weaker now. We used to have four semesters of math, no room for electives, and more labs.”

Student comments about unhelpful things that some faculty do

- “Some faculty are more approachable than others. I wanted to go to office hours and asked my professor where his office was. He said, ‘It’s in the syllabus, look it up.’ After that, I didn’t want to go to office hours anymore—it felt like he was saying that I’m stupid.”

- “I feel like some professors don’t want to teach Core classes, like they feel they’re too basic, too low for them. Faculty will say, ‘This is simple, you should know this.’ If you try to talk to these faculty about things you don’t understand, they make it seem like it’s just obvious.”
- “The tone of one of my professors is tough. I go to office hours and I feel like he’s saying, ‘You’re just a dumb-ass.’ I got used to it, but it doesn’t help a lot of students.”
- “Most professors forget what it’s like to struggle with a certain concept.”
- “Some faculty, subsets of particular departments, think of grading in a certain way and grade very hard.”
- “Students are angry about this course. They go to office hours and ask faculty for help. The faculty member asks if they did they reading, and when students say yes, the professor says, ‘Well, it’s in the reading.’ You ask faculty for help and they say no.”
- “Faculty in Department X are hit or miss. The way they approach conversations can be a problem, like when they say, ‘Didn’t you learn this in high school?’ One professor made students in my class cry, and I was like, ‘Is this what college is going to be like?’”
- “I came here loving subject X, but the Core destroyed that—it was plug and chug. Professors weren’t interested in teaching the classes; I didn’t see passion or interest from them.”
- “Some classes are challenging in a way that’s empowering, and some are challenging but not empowering. It all comes down to the faculty.”
- “Some faculty have an interesting sense of humor. Some professors aren’t emotionally intelligent. I know them better now, and see that they care, but it was hard. Sometimes you ask a question and they make it sound like it should be obvious. It’s their tone. If you ask a question they think is obvious, they’ll say, ‘Well, what do we remember about X? We went over this a few weeks ago.’”
- “Department X can be off-putting at times; they can be sassy. But they care. I’ve gotten used to it, but I’ve seen lots of friends struggle with this department.”
- “I went to office hours and as the professor was walking me through a problem, he made a mistake and couldn’t finish it. Then he said, ‘Well, the rest is just math.’ That wasn’t helpful.”
- “For some classes, you really need to know that you want it. Some classes were not taught in a way that was conducive to me. The text was not assigned and the professor wasn’t helpful when I went to office hours—he told me just to do the work and grind through the problems. Or he just regurgitated lectures and didn’t help me understand.”
- “I’m angry at Department X. They provide negative motivation to learn.”

We are certain that some of the negative faculty comments students reported were meant to challenge and motivate them, or they may have been poor attempts at humor. Unfortunately, as we’ve found in our research on diversity,⁶ negative comments have more impact than supportive comments. As one student said, “One of my professors makes ‘humorous comments,’ and if you’re not completely confident in your ability in that subject, it can destroy you. There is a poisonous culture in certain areas of HMC.”

A number of faculty commented on the fact that Harvey Mudd students have difficulty seeking support. Some of them saw that as students being unwilling to admit that they needed support, but others saw it as connected to some of the negative comments we cited earlier.

⁶ Roksa, J., Kilgo, C.A., Trolan, T. L., Pascarella, E. T, Blaich, C. F, & Wise, K. S. (pending review). Engaging with diversity: How positive and negative diversity interactions shape students' cognitive outcomes, *The Journal of Higher Education*.

Faculty comments about students' unwillingness to seek support

- “There’s a stigma about asking for help here. I try to encourage students to come to office hours, but it’s not seen as a good thing.”
- “There’s a shame around deficits. Students try to hide what they don’t know.”
- “Failure is a tricky thing here. You can get on the bad side of an instructor, a major, a department. You might choose another major because of this. Failure is dangerous for students. Faculty are not always as generous as we could be; we don’t always see failure as formative.”
- “We celebrate people who know exactly what they’re doing, and students are hungry for examples of more circuitous paths. Scientific practices reinforce notions of certainty—the meandering, circuitous nature of science has been written out of the books. Summer research is the only place where students learn this, and it’s still hard for them to deal with failure then.”
- “Students here don’t want to ask faculty for help. They don’t want to be seen as stupid, and they won’t ask for the help they need.”

Ratcheting student workload

We were surprised to hear how carefully many departments monitored the amount of time that students spent doing homework in their classes, and how quickly they increased the workload to ensure that students focused enough attention on the department’s classes.

Faculty comments on ratcheting student workload

- “The mentality here is, ‘Do it all and . . .’ Departments don’t want to give anything up.”
- “To get students’ time, you need to give them a problem set, something tangible to work on so they spend time on it. It’s an arms race.”
- “Could we have a better sense of collectivity at HMC and not always just look out for our own major?”
- “If you want to get students’ time in the Core, you give them a problem set. We all do it—it’s an arms race.”

In essence, according to some of the comments we heard, departments are competing for a finite resource: students’ time. Each department ratchets up the workload in order to keep students’ attention and to squeeze in more essential concepts. But at some point, when students are stretched far enough, all this results in is departments stealing students’ time from one another in a zero-sum game. Many of the students with whom we spoke appeared to be at this point.

Upholding the Honor Code

Our conversations about the Honor Code with students and faculty were striking because, if we didn’t know otherwise, we would not have been able to guess that the students and faculty were talking about the same thing. One student unknowingly provided a fair summary of the difference between how faculty and students talked about the Honor Code in our conversations saying, “I feel like faculty only care about the cheating part of the Honor Code, not the rest of it.” Most students talked about the Honor Code as a broad “Don’t be jerk” dictum that should guide students in their life at Mudd, inside and outside of their academic work. Students did not talk about the Honor Code in legalistic or technical terms, but as a golden rule or guideline that exemplified the kind of decent, noncompetitive community they wanted Mudd to be. On occasions when they started talking about specific behaviors, such as whether one should

self-report for closing an exam a minute after the deadline, it was clear that students didn't agree on the answer.

How students described the Honor Code

- "It's a way of living."
- "Asking yourself, 'Would I be proud of my choices? Given a choice, do I make the right choice?'"
- "I feel the benefits of the Honor Code when I can leave my stuff unattended on campus. I don't feel like I'm governed by the Honor Code in class, but I feel like the Honor Code is present when I'm walking around."
- "We treat it as, 'Be good to each other, don't be a jerk, don't die (i.e., don't drink too much).'"
- "The Honor Code makes the place close-knit and really chill."
- "It's one of the reasons I came to Mudd. It facilitates trust between students and faculty and students and other students. It allows us to do different things, like have a student-run machine shop and have three-hour take home exams where you can cover more content."
- "The Honor Code is valuable because it allows us to take responsibility for our actions. We need to repair trust with the community if it's broken."

Faculty discussions about the "why" behind the Honor Code were focused more on the qualities of taking credit only for one's work, being a professional, being ethical, and learning to make hard choices in difficult situations. We think it would be fair to say that the faculty conversations focused on helping students develop and adhere to important but abstract ethical principles, while the student conversations focused more on their social compact with one another.

How faculty described the Honor Code

- "We value process over product here. It's important to do the work that leads to the product—it's not just about writing a great paper."
- "The Honor Code is part of professionalism, being the kind of people employers want to hire."
- "The Honor Code is a great example of integrity, but I don't take the time to explain it this way in class."
- "The morality behind the Honor Code—students are cheating themselves if they do well on homework but then fail on an exam."
- "The Honor Code is part of the character of HMC. We want graduates to be ethical leaders, people who don't take the easy way out. Learning how to make choices in tough situations takes practice."

In many ways, the difference in the way that students and faculty talked about the Honor Code reminded us of Carol Gilligan's important work on the difference between masculine and feminine moral voices, with many faculty adopting what Gilligan might call a masculine moral voice and many of the students adopting a feminine moral voice. For Gilligan, a masculine moral voice focuses on upholding justice and moral principles, while a feminine moral voice focuses more on respecting relationships and taking care of other people.⁷ Our understanding is that Gilligan did not see these voices as fixed or mutually exclusive, nor did she believe that one voice was inherently superior to the other.

⁷ Gilligan, C. (1982). *In a different voice: psychological theory and women's development*. Cambridge, MA: Harvard University Press.

We raise this point not to argue for Gilligan’s ideas, but to show an example of how two different groups of people may reflect on moral issues in ways that lead them to talk past one another or misjudge the extent to which the other “gets” certain moral principles. In some ways, this is what we heard in some of our conversations with faculty about the Honor Code. For these faculty, violating the Honor Code was a matter of mistakes, not misunderstanding. Students violated the Honor Code because they had too much work, they were too worried about their grades, or they were succumbing to the intense workload.

Faculty ideas about why students violate the Honor Code

- “They’re desperate for time, desperate to get their work done, and they take shortcuts.”
- “They say they can always just look it up in the real world.”
- “The pressures students feel from the workload are putting pressures on the Honor Code. HMC has an oppressive curriculum.”
- “Students make subtle justifications for cheating because of the challenging environment.”
- “A self-enforcing Honor Code isn’t natural for students.”
- “Students have temptations to cheat—concerns about getting a job, needing to be seen as smart by other students, approval from parents.”
- “The workload and Honor Code violations are intertwined—you can’t separate them.”
- “Pressure from parents, pressure everywhere, leads to shortcuts.”
- “What are the consequences if a student violates the Honor Code here? It’s student-administered, and students have a hard time throwing the book at their peers. More students should be kicked out of college for Honor Code violations. Students at other colleges don’t have a hard time kicking their peers out, but ours do. Why won’t our students do this? We’re behind the curve here.”

However, a number of other faculty took a more developmental approach and wondered where and when students had the opportunity to reflect on their own behavior and some of moral ideas that faculty valued. For example:

- “There’s a lack of clarity and fudging in gray areas—questions about appropriate collaboration.”
- “Learning to collaborate is really a learning curve for students. Learning intellectual honesty and integrity doesn’t come naturally.”
- “Students don’t have valves to release pressure from hard classes here. They lack time to reflect, to step back. If they had time to step back and reflect, they might not be as prone to succumbing to pressures that might lead to cheating.”

In one of our conversations with faculty we asked, “Where do students learn why violating the Honor Code is wrong?” One faculty member said, “When did we start having to explain why cheating is wrong? We shouldn’t have to do this.” But several others in the group agreed that students need to learn the “whys” of the Honor Code. One person even said, “That is more important than the technical prowess we value, but I don’t take the time to do this in my class.” Someone else thought that “there are places in the curriculum for more mindfulness around areas of character building.”

We also asked students where they learned the “why” behind the Honor Code. They said:

- “We don’t have a conversation about the ‘why’ behind the Honor Code at HMC.”
- “If I ever saw a case, I don’t know what I’d do. The policy isn’t clear.”
- “There’s doubt around the Honor Code. We don’t talk about it and that makes it more amorphous.”

- “Where’s the line in terms of Honor Code violations? There’s a lot of disagreement among students about this.”
- “The Honor Code information during orientation was scary. It was just a list of things I couldn’t do—there was nothing about the reasons behind the Honor Code. It was scary to think about reporting on friends. In practice though, if I see a friend cheating, I just mention it to them and they’re usually embarrassed. The impression I got from orientation is different than what it is in practice, and I like what it is in practice.”

For the students we spoke with, their education at Mudd about the principles behind the Honor Code (not the things that were and were not violations) came mostly from other students. So it is not surprising to us that their perspective of the Honor Code includes how students should treat one another.

It may be useful to think of the concern around the Honor Code as an educational issue. What do Harvey Mudd faculty want students to learn from the Honor Code, and where and how will they learn it? In our view, if a student learns that X is permissible and Y isn’t, they’ve learned a rule. If a student learns *why* X is permissible and *why* Y isn’t, they’ve been educated. Our sense from our conversations with students is that, when it comes to academic honesty, Mudd students earnestly focus on the rules (i.e., Should I self-report if I closed an exam one minute too late? Is it okay if I get help from another student to figure out this problem?), but not the integrated rationale behind the rules. Where at Mudd does the education behind the Honor Code take place? Who is responsible for it? Our response to the argument, “When did we have to start explaining why cheating is wrong?” is similar to our response to the argument, “When did we have to start teaching these more basic concepts in math?”—when Mudd students needed these things so that they could fully develop in the ways identified by Harvey Mudd’s mission and core values.

If Harvey Mudd faculty choose to develop a more intentional process to help students understand the principles behind the Honor Code, we think it would be wise to remember something we heard in our conversations with faculty: “We need to fix the Honor Code, but I’d like to find a way that doesn’t involve faculty taking control. I don’t want to create an ‘us vs. them’ environment. We need to figure out how to fix it at the cultural level.” We think this is sound advice.

We should also note that our conversation with the students on the Honor Board was different from our conversations with students in general. We were impressed by how seriously they took their work, right up to a careful examination of trend data on Honor Code violations that they prepared specifically for our meeting. (It was a pleasure talking with such numerate students!) However, it was clear that their work on the Honor Board was challenging:

Serving on the Honor Board is psychologically draining. A violation shows that the Honor Code didn’t work. I wonder, “How can I judge someone who is in a different situation than me?” There are shades of grey. You make a decision on the case and then render a judgment, and you realize how that judgment will affect the person—that makes it very personal. In one case, it took one hour to reach a verdict and six hours to determine the consequences.

However draining it is, this caution is appropriate. Consequently, we were surprised when the conversation switched from a careful discussion of gray areas and the serious responsibilities they had in determining the consequences of Honor Code violations to a much more black-and-white view of

infractions in which they saw their role as “laying down the law.” It was clear to us that some of the students on the Honor Board would also benefit from further guided conversations about the differences between laws and morality, what justifies “being smacked down,” and again, some of the deeper principles behind the Honor Code. As impressed as we were with the students on the Honor Board, we would be hesitant to allow them to mete out punishments as serious as expulsion, which is the role some faculty wanted them to play.

Conclusion

Our reflections on what might benefit Harvey Mudd’s students are founded on the college’s two most important assets: incredibly talented students and deeply committed faculty. No one with whom we had the privilege of speaking was going through the motions. Harvey Mudd is truly an amazing place. But we also think there are things that should be better—things that, if they go unchecked, will undermine Harvey Mudd’s unique mission and service to its students.

We have enjoyed the opportunity to speak with students at well over a hundred colleges and universities in the last decade, and we have never heard such a wonderful combination of intelligence, maturity, work ethic, willingness to see failure as their own, and generosity toward those who were unkind to them. Harvey Mudd students are also ambitious and driven, but in ways that good teachers can harness toward good educational ends. That’s why it broke our hearts to hear the blunt concerns about the general decline of Harvey Mudd students from some faculty, and the hopefully well-intended but harsh and demeaning comments that students heard from some of their faculty. Faculty we’ve met at other schools would give their right arms to teach students like Harvey Mudd students. Harvey Mudd faculty are privileged to have the students they have however they have changed, and while we heard this from some faculty, we did not hear it enough. It is so unlike our recent experience at an Ivy League university where faculty responded to the question of why they like to teach in a particular program by exclaiming in unison, “The students, of course!” and then talking about the joy of having the opportunity to work with students of such high but unformed potential.

The Teaching and Learning Committee asked us to “review and recommend strategies for the Teaching and Learning Committee (TLC) as we plan future work with faculty in supporting our students in two specific ways: (1) upholding the Honor Code and (2) appreciating their own growth and success in a challenging curriculum.” Our recommendations are simple: first, be more generous in addition to being tough, and second, create time for students to develop the qualities that the institution values, including the values behind the Honor Code.

Why don’t Harvey Mudd students appreciate their own growth and success in a challenging curriculum? The answer seems to be simple. They struggle in a curriculum that not only is intellectually demanding, but also creates so much work that the best these incredibly bright, ambitious students can do across their courses is “okay.” Focusing on one or two courses in which to excel means doing poorly in their other courses, unless those are HSA courses, which they treat as relief valves. So, accomplished students are consistently falling short of their desire to be excellent. As their confidence wanes and as they begin to doubt themselves, they hear, “You should’ve learned that in high school” or “That’s so basic, you should get that.” Hearing these comments from faculty whose opinions they revere, even if it’s only a few faculty, confirms their doubts. Under these conditions, not appreciating your own growth and success is a rational response. If nothing else changes, students would benefit if more of the faculty, especially those

teaching in the Core, blended being both demanding *and* supportive, as well as tough *and* willing to work with the talent they have.

Second, if Harvey Mudd truly values the liberal arts beyond the “shortcomings of a traditional, narrow technical training,”⁸ then it needs to express those values by creating time for students to truly engage in their courses outside of the sciences, to reflect on how what they learn in these courses connects with their work in technical courses, to reflect on the deeper purpose of the Honor Code and its implications for their work, and to cultivate other humane interests and passions. This will require more than just creating space in students’ schedules for other activities. Given the culture at Mudd, which values technical academic work above all else, and the pressures that students feel, students will inevitably fill empty spots in their calendars with more tech classes. Harvey Mudd faculty and staff need to structure opportunities for students to engage in these other kinds of work and help students learn how to do it well. For example, the capacity to reflect is not innate—people must learn how to do it and get feedback on their efforts. We understand, of course, that making changes like this will mean reducing some of the workload in the technical courses.

Is it possible that students might truly learn and retain just as much, if not more, if some of Harvey Mudd’s technical courses covered a little less content with more of a focus on depth and quality? Please note, we are not saying that Harvey Mudd should reduce the amount of work that it asks of students. Indeed, not one student suggested that Harvey Mudd should get easier. They wouldn’t respect themselves if it did. Instead, we are asking whether there is a different way of being demanding that produces deeper and broader learning.

The key, we think, to addressing the questions that the Teaching and Learning Committee asked us is to reflect carefully on whether Mudd’s curriculum, as it is now implemented, has reached a point of diminishing marginal return, so that each additional problem set and each departmental attempt to garner more time from students results only in taking time away from the work they are doing in some other aspect of their education. We’re not only talking about taking away time from other science departments, but also taking away the kind of reflective time that students need to benefit fully from the different kinds of thinking and knowing in their HSA courses or from the out-of-class and non-academic activities that are a hallmark of a residential liberal arts college.

We also aren’t suggesting changes in the structure of the curriculum. What we are suggesting is a conversation that starts from the premise that the sum total of students’ work across their courses every semester should be intense, but it should also allow students who work hard the chance to fully engage all of the liberal arts goals that distinguish Harvey Mudd from other technical institutions. This will be a challenging conversation because it will require some departments that are not accustomed to giving up some of their hold on students’ time to do just that. It will require a conversation across the entire institution and this will be challenging because at every step along the way, some faculty will feel like they are lowering their standards. Faculty in many departments don’t currently have to make hard decisions about where and on what, *as a whole*, students should be spending their time because, by competing and ratcheting up the workload with faculty in other departments in what may be a zero-sum game, they let the students figure out where they will put their effort and where they will make do. In our

⁸ <https://www.hmc.edu/about-hmc/>

view, it would benefit Harvey Mudd students if the faculty, as a whole, tuned and aligned their respective requirements so that the curriculum better implemented the stated values of the institution.