

Reading seminar on *An Inclusive Academy*

Notes from Week 2

Topics/Questions to Keep in Mind

- Facts or ideas you found Surprising, Interesting, or Troubling (SIT)
- Anything you didn't get to bring up last week.
- Have you had training to do peer review? If so, what did you learn? Do you think more training to do peer review could be helpful?
- Can you think of a time that you've made an error using one of Kahneman's "three heuristics" (representativeness, availability, anchoring)?
- Ways we rely on poor data and end up making faulty predictions.
- Did you find Thomas Magnanti's 2002 quote about thesis committees surprising? Why or why not?

Recap from Discussion

Key topics/points discussed

- How there are many underlying/systemic problems and even if we were able to "solve" problems with the 3 heuristics, we still would not be as diverse/inclusive as we'd like.
- How the 3 heuristics arise in graduate admissions.
- Ways we currently try to combat the 3 heuristics.
- What we are worried about when taking risks in admissions.

More detailed notes from the discussion

- It is not clear that solving representativeness, availability, and anchoring would solve the underlying/systemic problems.
 - E.g., In library science there don't seem to be these problems, but still most directors and people in positions of power are men.
 - E.g., Gigliola's experience in Italy.
- The chapter is not necessarily a comprehensive list: how can well-meaning people who don't seem to have glaring biases still behave in biased ways?
- It seems surprising that often people who try to be helpful to promote diversity and so on, can then become more justified in doing harmful things (moral licensing).
 - Moral licensing also applies to institutions.
 - In the wake of the BLM movement, there have been a lot of individual actions; doing one small thing that "clears your conscience".
 - Good section to put at the beginning of the book; your work doesn't stop when you finish reading the book!
- The 3 heuristics in grad admissions:

- We see a lot of files from various different countries, universities, etc. and it is much simpler to evaluate someone with a letter from a recommender we know (experience with the person/reading letters from them).
- It is easier to evaluate the transcript from a student from a school from which we've had past students.
- When there are applications with issues, we often ask people. For example, we used to not know the Chinese university system well and weren't able to assess applications from less well-known universities in China. Then we started to ask people who know the Chinese system well. It is important to have representation among the faculty in order to evaluate the application.
- How do we stay away from these heuristics?
- Do we accept graduate students that we later regret?
 - Very few students are "perfect" in the sense that you meet with them once a week and they tell you something brilliant every meeting.
 - What is a good metric for success?
 - The easiest metric might be that they become professors somewhere (that we respect). However, you can do a lot of great stuff that doesn't involve academics, or involves academics, but doesn't involve research. We need to learn to value those things more as successes. It doesn't make sense for all of our students to become professors; there aren't even enough positions!
- MIT admissions surveyed faculty about students who represent the "values" of MIT and looked back at applications to see if they could find anything to predict how well they would do (not just academically, but also in terms of building community, etc.).
 - They found nothing distinctive in these students' applications.
- Risks in admissions:
 - If we are admitting people to graduate school/a workshop/a conference that have a high chance of success, we'll gravitate to people who we reliably think will be a good fit. We might not accept people who might not be able to attend a workshop or complete the program because of circumstances outside of their control (reliable internet, ability to fly from their country, family issues, etc.)
 - Is a certain percentage of students who don't fulfill our "hopes" a good sign?
 - Sometimes students who look like they're no risk are a lot of work for the faculty!
 - Should we even be asking how much risk we're willing to take on to people who don't have the background we're used to?
 - We are already intentionally trying not to reproduce ourselves, and need to learn more about how to do this more effectively.
 - Part of the point of doing this reading is to try to push back against the initial feeling that we're "not the problem" and try to reflect on more ways that we can do better.
- Something that is very hard to get out of an application is how hard the person is willing to work.
 - How much does that metric disadvantage people who have very different circumstances?

- Success in the grad program does not only depend on the student, but depends on the environment.
- Given two similar candidates, one from a school we're familiar with, and one from a school we're not familiar with, what are we worried about when not accepting the second candidate?
 - Worries: Cost (\$100K/year), unsure if students will thrive, etc.
 - Need to change the program to make sure people from a non-uniform background can succeed.
 - Have tried to create a 2 year post-bac program, but it has been very difficult to create for a number of reasons.
 - Many grad programs are aimed at serving the field, not serving students (and benefits for the students are incidental to the goal of spreading knowledge and producing research in the field).
- There are many ways in which MIT is involved in the process of mathematicians moving to grad school: accepting students, but also in producing undergrads that apply to other universities for grad school. How can we better prepare our own undergrads to apply to a grad school that mostly consists of people who aren't like themselves?
- Part of becoming a good researcher includes a need to learn to feel stupid, take risks, and challenge the extent of what we know. We don't necessarily have the same culture around other professional activities in terms of taking them as seriously as intellectually challenging problems as research. We need to change that in order to improve.