Disorientation, Adaptation, Empathy, and Grace

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Like many college instructors, I found the sudden shift to remote instruction in March 2020 to be a profoundly disorienting experience—physically, mentally, emotionally, and spiritually. I was no longer biking to my office on campus but sitting in a makeshift home office. Instead of sending my kids off to school, they were clustered around the dining room table for much of the day, often with one or two neighbors from their school pod joining them. I had to abandon my research laboratory and cancel offers to research students for the summer. Familiar and comforting daily routines were laid aside in a frantic scramble to find a new "normal." What could I keep from the ways I taught my courses face-to-face and what would I change?

I commonly employed active-learning group exercises in my organic chemistry and general chemistry courses, either with assigned or randomly determined partners. Normally, I could easily walk around the room and subtly monitor the progress of each group while listening in on bits of their conversation and looking for evidence of good problem-solving approaches. I was very unsure how I was going to adapt this system to remote instruction using Zoom. Sure, I could create random breakout rooms each class, but I felt that dropping in on several groups during a relatively short class session would be disruptive to their process (unless they invited me to join them by requesting help) and likely counterproductive. I wanted a less invasive way to check in on them and monitor their progress. Since our college has ready access to many Google apps, my colleagues and I settled on using a Google Slides link for each course section (updated for each day's activities) as a kind of worksheet for group activities. Each group would have a few slides to complete that would clearly indicate their progress through—and responses to—the questions posed. Not only could I comment on individual slides while they worked, I could also switch to a grid view to see the entire class's slides at once to rapidly determine each group's progress (a major advantage over using a shared Google Doc). My colleagues and I were thrilled with this setup, and my students (both in lecture and laboratory courses) voiced appreciation for the sense of community that this synchronous mode of instruction fostered.

I embraced a few other teaching innovations for remote instruction. I delivered lectures with the Explain EDU iPad app, importing PowerPoint slides and annotating them whiteboard-style with an Apple pencil. I created keys for worksheets and exams in Notability on the iPad and graded exams and lab assignments (and student graders graded homework sets) with Gradescope. While I don't expect to use Explain EDU when I return to face-to-face teaching this fall, I will keep using Notability and Gradescope. Annotating PDFs and taking notes on the iPad with Notability (that I can readily organize by topic and export as PDF files) is something I definitely plan to continue, even with the extra weight of an iPad on my daily bicycle commute.

Gradescope is especially helpful for large classes or multiple graders, and I have been impressed by the increased transparency, efficiency, and equity in grading that it affords. Regarding transparency, students can see exactly why they gained or lost points, and there is an integrated system for requesting regrades with the student's original submission still readily accessible. Regarding efficiency, physical exams or worksheets do not need to be transferred among different graders, and I can give the same feedback to several students without having to retype it. Simple and identical answers can be grouped and graded together, and scores can be readily transferred to our course management system. Students can either annotate PDF files directly or upload assignments to Gradescope that they printed, completed, and scanned. Regarding equity, I grade just one item for all the students at a time. I generally do not know whose submission I am grading, removing some potential bias. Overall, feedback to students has become timelier and grading has become less burdensome, while student learning and success have remained consistent. I'm not sure if I'll ever print out student exams again!

This whole process of adapting to remote instruction has grown my sense of empathy for my students' experiences. While teaching face-to-face had become somewhat intuitive to me, I realized that I needed to regularly reorient myself to what was going on in the online versions of courses that I had been teaching for years. As I struggled to remember what day of the week it was and when major course milestones were occurring, I realized that my students—who were navigating a course that was much less familiar to them than it was to me—were certainly much more disoriented than I was. I, at least, had a solid grasp of the course material, if not the new course structure. My students did not have that luxury, and they were simultaneously navigating the demands of 4-6 other courses and laboratories that semester. They were disconnected from their peers since they couldn't live on campus, and even advice from more senior students when available—was less helpful for newly transformed courses. I had recently audited three semesters of college Spanish courses in preparation for a sabbatical year in Mexico, so I thought I had some appreciation for students' perspectives in a new course. But even that experience, though relevant to a degree, did not accurately reflect the disorientation my students were feeling in the transition to remote instruction. I was also aware that my students came from a wide range of family and living situations, and that those differences and inequities were likely magnified without the (pseudo-)equalizing effect of a residential campus environment. I responded by being more flexible in the modes of engagement I offered students. For example, they could have their video on or off, they could ask questions audibly or post them in the chat (publicly or privately), they could annotate our shared Google Slides, and they could engage the course asynchronously if/when they needed to. While this gentler and more intentional approach was not a panacea, it clearly communicated my care for and to my students.

I will continue to seek ways to offer students options for how they engage with each other and with me. For example, I may give explicit permission for pairs of students to divide the duties of writing their answers on the board and explaining them to the class rather than always insisting that both group members participate in the verbal explanation. I will also invite my students to

propose alternative modes of engaging course material, listen generously to their responses, and be more attentive to their situational needs.

Looking back, this transition to remote instruction has made me even more aware of my need to extend grace to my students and to myself (Su, 2014). They are at least as disoriented as I am, even if they don't show it. They are having to adapt to college and to all their courses. I have a growing sense of empathy for their struggles and am ready to respond. I will keep working to educate myself about systemic injustices that my students (and colleagues) face and act against them as I am able. While I have always aimed to treat my students as whole people and not to measure their worth by their performance in my courses, I am continually reminded that I am not superhuman and am as much in need of grace as they are.

References

Su, F. E. (2014). The Lesson of Grace in Teaching. In M. Pitici (Ed.), *The Best Writing on Mathematics 2014* (pp. 188-197). Princeton: Princeton University Press. https://doi.org/10.1515/9781400865307-016 Also available at: https://www.francissu.com/post/the-lesson-of-grace-in-teaching