Instructor: Tim Randolph
Department: Computer Science

Date of Teaching Observation: November 1, 2019

Course: Comp Sci W4236, Introduction to Computational Complexity

Attendance: 29 students present (39 students enrolled)

Location: School of Social Work, Room #903

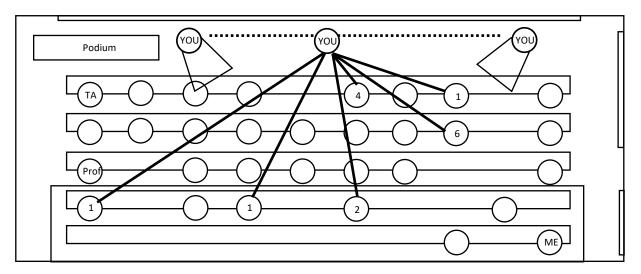
Observing Partner: William Frey

Context

This course is a lecture-based course where Tim has been invited to give a one-off lecture. The professor started by reviewing some information, and Tim gave a lecture after the professor completed this review (his lecture was roughly an hour and a half long). Overall, it was a lecture of just board work. He was walking through math in a sequential manner and drawing some figures to help bring clarity. The course is open to both graduates and undergraduates. I was also able to provide an audio recording for Tim so he could review his own teaching.

Pre-Observation Meeting Summary

In our pre-observation meeting on October 30, 2019, you expressed that one of the most important learning goals is making sure that the lecture and board work you do go into students' notes. You stated that you would like me to focus my observation on the follows aspects: 1) appealing to multiple learning styles, 2) making sure the class is a comfortable learning environment for everyone, 3) the speed and pace of your lecturing, and 4) the clarity and coherence of your instruction.



Observation Participation Visual

Summary of Observation:

Tim, I was really impressed and appreciative of many aspects of your instruction, including your initial outline of your lecture on the board, being open for questions and correction throughout, and something as simple as your very clear and large handwriting. I am even more impressed by the circumstances of having to lecture as the professor sits right there and all of the students seemed to be deeply engaged and connected to all that you were doing on the board. You started by giving students a way to contact you with any questions, and I really loved the way you provided an overarching question, which would be the basis for your entire lecture. The following are my top

two observations: speed and pace, clarity and coherence. I will share my thoughts about your appeal to multiple learning styles and the learning environment in person.

Observation #1: Speed and Pace

As you discussed with me during our debrief meeting, one of the aspects of your instruction you wanted me to observe was the speed of your and pace of your lecturing. There were various moments throughout the lecture where students demonstrated the positive aspects of your speed and pace. For example, when students ask you questions about corrections in your board work; it really displayed that they were able to keep up with your work and felt comfortable enough to interject with questions, rather than being too lost and far behind to do so. Additionally, your writing very clearly and large on the board also seemed to help with the speed and pacing of your work as well.

There were many moments during your lecture where, because of timing I assume (and having to cover a large amount of material), you wrote on the board and lectured at the same time. There were moments where students on the side of the room behind you may have had a hard time reading your board work and hearing your lecturing. You may consider a couple possible strategies for supporting student learning in these moments. First, there were other moments where you were very cognizant of this and decided to write on the board and lecture after you had completed writing on the board; this also gave other students a moment to catch up with the other pieces you had written on the board. Additionally, you may consider sending out a skeleton of your lecture to the class before you start so they both have the option of looking at it on their devices or printing it out. This may allow students to focus more on the content and process you are going over rather than potentially worrying so much about keeping up with your speed and pace. Finally, if you were or ever worried about speed and pacing in the future, you also might consider naming it out loud and asking the students and audience if they are doing okay with the speed and pace. This may give you a lot of information about and shifts you might need to make and show that you are willing to make adjustments for the students.

Observation #2: Clarity and Coherence

The students seemed engaged throughout your entire lecture, both through their rigorous notetaking and the various corrections they pointed out and questions they asked. You were also very in touch with the moments that could be very confusing so your reiteration of the material, various examples, and asking if there needed to be more clarity or if anyone had any questions really helped students have the opportunity to speak up if they didn't. There was a moment during your instruction when there was a particularly challenging equation and explanation and the logic for it was quote challenging, where you had to work through it in front of the class. I could see this was a challenging moment for not only you but for the students as well. In this moment, I think some of my earlier suggestions around providing materials before your lecture and additionally, perhaps considering moments throughout your lecture for your students to do the work and share their answers with you and the rest of the course may take some of the pressure off of you.

Finally, there were also moments throughout where you crowdsourced information from the students and these were wonderful opportunities for students to participate. What made this challenging was the student in the front and center of the room answered all of these questions. You may consider asking students to take a moment to work through something on their own and ask very layered forms of questions requiring different answers so that multiple students throughout the

room could participate. This would also give you insight into how clear and coherent your lecturing is and inform your ability to make adjustments.

Suggested Next Steps: