Thomas Kindred

Teaching Statement kindret@wfu.edu | www.thomaskindred.com

My approach to teaching stems from my experiences as a student and a teacher and from lessons I learned at Project NExT in 2019-20. Coming from a family of teachers, I have always felt called to this profession, and so, as I benefited from masterful teaching at the public (majority Black, 70% minority) high school I attended in Columbus, Ohio and then at Williams College, I focused not just on the lessons being taught, but also on the craft of teaching, especially the art of cultivating classroom community and dialog. Then I spent four years—one in Columbus and three in Mississippi—teaching diverse high school students in urban and rural settings. Predictable structure and human connection were key to student success. As a TA at Iowa, I worked to refine my skills at delivering clarity, cultivating dialog, and radiating passion for the subject. At Iowa and during my first semester as a Postdoc at Nebraska, things went well in the classroom: I delivered wellorganized, energetic lectures that often functioned more as conversations. Students and I connected, and (to varying degrees) they mastered the material. After my first proofs course the next semester, however, it was clear I needed to expand my toolbox. It was time for Project NExT. Since then, I have implemented several new teaching techniques, building incrementally on what has worked well and adapting where this is most needed. Most recently, I have renewed my focus on teaching fundamentals, e.g. by always calling students by name and making special efforts to bring more students more frequently into office hours. Below are some highlights of my teaching practice and philosophy.

1. Objectives

I have two core goals as a teacher. The first is that each student will acquire a basic command of certain core skills and concepts. I like to think of teaching in terms of storytelling, with long narrative arcs and short ones, woven into a tapestry; the great primordial power of this art form lies not in the teller, but in the story itself. My aim is that, by the end of the course, students will have their own version of the story to tell. It should be woven from the same sorts of threads in the same general pattern, but it should be theirs. This narrative vision of cohesion is anti-rote. A rote lesson forgotten is gone, but a forgotten thread in a tapestry can be recovered by recalling the bigger picture surrounding it. Any student may one day forget some specific skill from my course, but if we have succeeded then they will still have a framework of understanding that makes it easy for them to recover this missing thread.

My second core goal is to do right by each individual student on a human level. I need my students to know that I see them and care, above all else, about their well-being. On the level of each classroom community, the most important thing is to build a shared rapport, then trust, and eventually that good agape love that Martin Luther King Jr. spoke about. On the individual level, the most important thing is that I make myself genuinely available and fully present to each student, in and out of class. I listen. My core goal here is to convey to each student that I care about them as a whole human being.

2. Architecture & learning environment

Prior to the start of each semester, I create a classroom architecture, a set of policies and procedures that will remain in place throughout the semester. I convey much of this structure the first day of class by putting it into action. For example, if group work will be a regular feature in our classroom, we do group work the first day. We take time to introduce ourselves and meet one another. We make productive use of the entire class time. We end on time. By the end of the first week, students know exactly what to expect from each class meeting.

I am in the classroom five minutes before class begins. I welcome students by name as they arrive. I get everything in order so that we can hit the ground running when class starts: my notes are out, and I have checked that all technology is working. If we will be building on definitions or theorems from a previous class, I have written a "Recall" synopsis on the board; if we will begin with an example, this "OPENER" is on the board already. A short homework assignment is due before class begins. The second hand on my watch tells me when we start. I begin by earnestly thanking all my students present for being on time. (Support and encouragement are almost always the best motivators, although hard truth-telling has its occasional moments.)

I begin the lesson with a brief description of how today's learning will interact with various narrative arcs within the course; across the semester, key themes and slogans repeat during these moments. What happens next depends on the course and the lesson. Sometimes, I give students five minutes to work on the opener. Sometimes, we jump right in to group work, picking up where a previous class ended. Sometimes, we get started with an interactive lecture. (More on this later.) In courses with regular group work, I try to wrap up any lecture within the first third of the class time, giving them the guidance they need to get started solving problems independently. In some courses, I spend a majority of the time lecturing, but I learned at Project NExT that education research shows unequivocally that students benefit from at least some active learning component each time a class meets. To hold myself responsible to this ideal, I assign one daily Class-WORK problem for students to do independently from me and then scan and submit electronically by the end of the day. I grade these just for completion, so they operate as attendance grades, but they also function as daily formative assessments. They also provide a daily opportunity for me to encourage students to be unafraid of making mistakes and remind them how useful "mistakes" are for their learning.

My years teaching high school taught me that the reliable procedures of a fixed classroom architecture are vital to student success, and student feedback continues to reaffirm this value. Classroom architecture carries a dual benefit too, in the form of the "negative space" around it, where nothing is fastened down and possibilities abound; this is where creativity, imagination, and adaptation come to life; this is the learning environment.

When group work begins, I encourage students to introduce themselves to one another. "Make a new friend." "Make sure everyone is included." I walk around the classroom, "What questions do vou have?" I take a minute or two with one group, then another and another. The second or third time I hear the same question, something really on point, I reply "This is a great question that the whole class will benefit from. I'd like to address this for everyone. Please give me a moment first." I quietly go back to the front of the classroom. I write some setup on the board. To the class: "I'm going to ask for your attention in 30 seconds." I allow them to wrap up their train of thought, then address the question. Brevity is key. Five minutes is typically my max here. One minute is better if it will do. I want to let everyone get right back to work. Sometimes, though, there's a great follow-up question and I see that all the groups are engaged with the conversation, so we keep it going for another five minutes.

During group work, students have brilliant insights that I want to share with everyone, but I also want to minimize interruptions, so I wait until the last few minutes of class to ask for evervone's attention one more time. I share these insights, crediting students by name for them. I pose an extra-challenging follow-up question for students to consider outside of class. (During the first week of class, I have pointed out how distracting it is, in past semesters, when students start zipping their backpack in advance, so these conscientious students have not acquired that habit.) I summarize the day's lesson and give a 10-second synopsis of our next class. One time this semester, I went a minute over; within a week I "gave the minute back."

Today, however, is like every other day: the second hand on my watch tells me that class is over. "See you next time, or in office hours."

3. Individuals and community

Ideal teaching and learning take place at the individual level, through one-on-one interactions. According to Williams College lore, President James Garfield described the image of an ideal education this way: student and mentor sit at two ends of a log, engaged with one another in dialog. Paradoxically, the pursuit of this ideal is inherently a community endeavor. Conversely, a vibrant classroom community develops through individual connections.

My lectures convey to students that I want them to engage. I use eye contact and movement around the classroom to maintain a baseline in which students are fully present. When I work an example, I ask for input about the next step. "Shout it out!" Or if I want students to raise a hand to answer, I raise my own hand and flicker it as high as I can reach, injecting energy and levity into the moment in the hopes of melting shy barriers and filling a few extra seconds so that more students' hands might also rise. After a few seconds, I call on someone, addressing them by name. The next time I ask a question, I call on a different student. A student raises their hand to ask a question. I finish my sentence and call on them by name. It's a great question and I convey this to the whole class as I answer it. This encourages more students to ask questions. Sometimes, because of the flow of the lesson, I prefer to continue lecturing for another minute or two before calling on them and so I make this request, usually non-verbally with eye contact and a hand signal. Then I thank them for their patience and invite their question. Trust builds and engagement grows in a virtuous cycle. "What questions do you have?"

In classes with regular group work, I sometimes employ visibly random, rotating, semi-assigned seating, a technique I adapted from Project NExT. When each student arrives in class, they draw a playing card; its suit designates a quadrant of the classroom for them to sit. This ensures that, rather than settling

into classroom cliques, students will meet and continue to work with a variety of classmates throughout the semester.

Garfield's image is more than an archetype. It is the model for office hours, where my students and I do our best teaching and learning. Students in office hours teach me about the most challenging parts of a lesson and what resonates, about natural misconceptions and pithy encapsulations. They get my undivided attention. We work at their preferred pace.

When I think it's time for a short break for their learning, I ask them about their major or their next math class. I listen and try to let them steer the conversation. Some students get right back to questions they have about our course. Some enjoy discussing a topic that has nothing to do with math. Some students ask about the knot diagrams peeking out from behind the door....

4. Excerpts from student evaluations on several themes

Full course evaluations dating back to 2018 are available on my website.

Challenging, inclusive, supportive learning environment

- I think that the balance between helping students and leaving them to figure it out on their own is about as good as it gets.
- Everyone was welcomed to participate and try
- I enjoyed coming to this class because I knew I would learn and Thomas cared about if I learned. Thomas challenged me. He would put more difficult questions on the board that I needed to think critically about.
- I would say that he is helpful for students with academic disabilities, moves quickly, however is very informative and a good teacher.
- \bullet great professor, accommodating, and formats tests well
- This class gave me an opportunity to interact with other students in the class via break out room, which helps me work with them on

- proofs to come up with answers and help answer questions. Also helps with building peer relationships.
- The group class work helps facilitate learning.
 Different people have different approaches to proofs which helps explore options that one person would not normally think of.
- I enjoyed having Thomas as an instructor, he supported me and I appreciated that I could tell he really wants all of his students to succeed.
- Dr. Kindred is an outstanding professor and instructor. Class was always extremely well prepared, and he was attentive to all questions. Dr. Kindred consistently had the students' best interests in mind, and had outstanding mastery of the subject at hand.
- Professor Kindred was always very willing to slow down and explain things as necessary to help students, both inside and outside of class. He also made an effort to get to know each of our names, which showed an extra level of respect and kindness.

Effective course design and instruction

- I really enjoyed this course and thought it was incredibly well organized. The way the notes were presented each day was very effective and easy to understand. Expectations were clear from the beginning and what was due or what we needed to know was never ambiguous. This was by far my favorite class and most well ran I have taken at Wake forest.
- The emphasis on good proof writing was very helpful in my development as a mathematician.
- As annoying as I may have found it, Professor Kindred forcing our attendance with homework and classwork really did help me from self sabotaging in this class.
- As annoying as it was I think being forced to do nightly homework helped me stay on top of things
- I like that we had weekly quizzes because they held us accountable to learn material every

- week. They prevented us from falling behind and having to learn everything right before the exams.
- I think the class had a good format overall by allowing us to go through guided notes on our own and then come together to explain any questions or difficulties.
- Thomas's lecture videos have been extremely helpful. They're concise but still have enough detail that I get the ideas....
- The professor always knew what notes he wanted to cover for each day and always ended class on time. The quizzes and assignments were given/due on the same day each week so it was clear what assignments were due each week.

Availability outside of class; feedback on student work

- Professor Kindred not only provided amazing and organized notes, but he also provided us with study guides and office hours and the review materials on canvas for us to refer back to. It was so helpful!
- I appreciated Kindred's Office Hours availability. When I went to him, he was able to explain it well in a way that was clear and made sense. He is a good teacher that really understands the material and clearly has a passion for it.
- The instructor is quick to respond to email and is really really helpful during office hours
- He explains things well and has lots of office hour opportunities
- Great feedback, very open to explaining even the smallest ideas, it shows that he takes his time on grading.
- Dr. Kindred gave a lot of feedback on our work which was really helpful.
- Professor Kindred sent back tests and onpaper assignments SO quickly and provided really helpful feedback on where we got steps wrong and how to improve better for next time.