

Creating an Engaging and Supportive Active Learning Environment

One professor can make the difference in transforming the university experience for a student; I focus on being the professor who will make the difference for my students, inspiring them to move forward excited about taking what they learn in-class beyond the classroom and eager to learn more. As a teacher my overarching goal is to create an engaging and supportive learning environment where my students will gain knowledge, critical thinking, and communication skills, while also discovering an appreciation (or even better a passion) for what they are learning about and how they are learning. Towards achieving my overarching goal I have highlighted below six personal tenets about the cornerstones of teaching and learning, associated learner-centred goals for my students, and how I teach to achieve these.

1. *Passion can ignite students.* When I teach, I am passionate about both the materials that I teach and how I teach. I think my excitement and energy for the contents and student learning helps to wake up students to both old and new ideas they were previously disinterested in or unaware of, igniting their learning in unexpected ways. Even for those for whom my class may be their only or last exposure to biology or statistics, I still want them to appreciate why what they are learning about is important, even if it isn't their passion. I foster the intellectual inquiry and curiosity of my students through a wide variety of activities where I demonstrate how the materials they are learning about can be applied in the 'real-world', and challenge them to find other contexts for what they are learning too. This includes development of students as researchers, thinkers, and communicators (Augustana Core Academic Skills). By enabling students to understand how course materials relate to the larger world beyond the classroom, students can better appreciate the broader value of the tools and knowledge gained in my class.

2. *Learning begins with a student-centered 'circle of niceness' supportive learning environment.* I am respectful of every student in my class and I want to encourage each student to participate in their learning. I think the foundation for effective learning begins with my students feeling that our collective classroom is a safe space in which they can speak up and feel supported. I tell them about this from the first day of class and continually use the idea of a 'circle of niceness' as a touchstone throughout each course I teach. In our circle of niceness, the class can embrace diversity in the people and ideas shared, thus facilitating dialogue and learning among student members. I also incorporate my quirky sense of humour into my classes to help foster a connection with students. Laughter can be the best medicine for learning – whereas the only kind of snickers I want in my class are candy bars. By continually putting students at the centre, and providing diverse learning opportunities and activities and feedback, I am creating an environment where student development of their academic and personal skills can flourish.

3. *Students must be engaged in their learning.* I believe that I should be a conduit for the learning of my students, but ultimately students need to be accountable and take ownership for their learning (guided by me). Towards this goal, I provide detailed resources that are readily available to my students, but if they don't come to class or engage with the materials then I feel stuck in helping them learn. So to try to get students to engage, I incentivize student learning through participation marks for in-class activities and provide diverse active learning and inquiry-based assignment structures. When possible I incorporate experiential learning (e.g., lab activities, field courses) to help students to reinforce concepts that they learn about in the classroom when they put them into practice. I differentiate instruction to meet the various needs of my students and ensure that in classes with both lecture and lab, that they are explicitly connected. I also want to foster creativity and engagement and ownership of projects in student assignments, which is

achieved through development of staged ‘choose your own adventure’ assignments. Adopting this type of assignment enables my students to gain experience developing their core academic skills as researchers, thinkers, and communicators. Through incorporation of diverse tools, I am helping to support my students being active participants in their own learning.

4. *Students are individuals first (and so am I)*. I develop an interactive relationship with the students in my class whereby I get to know them as individuals and they get to know me as a person too. I think it is important that right from the first class my students feel like more than just a number. Regardless of class size I quickly learn all of my student’s names and a little about who they are beyond *just* being a student in my classroom. This happens through introductory surveys and informal conversations during class and office hours, where I get to learn how I can support their learning (e.g., asking them how they learn best and what kinds of feedback they find useful). I also share my teaching philosophies and expectations for them and me in class and the syllabus. So that they get to learn about me as a person rather than just the teacher knowledge expert, I share personal vignettes and make linkages back to my own experiences as a scientist, as a parent, and as a student, including talking about undergraduate classes where I came close to failing - joking about how my experiences may still be relevant even if I may seem almost as old as a dinosaur in their eyes. I think that by me valuing students as more than just knowledge vessels, and allowing students to see me as more than their instructor, that this more direct connection enhances each student’s ability to learn from me. By knowing my students, I can customize my teaching to accommodate the individual learning styles of students, and also better understand how to engage them to help them learn.

5. *Risk is worth the reward*. I empower my students to overcome their vulnerabilities and push their boundaries and take risks that will enhance their learning and help them succeed, with the ideal outcome being that they find a passion in what they are learning. At minimum my goal is that students better understand how the learning tools I am providing them with may benefit them and help them to develop their core academic skills. I try to explain to students why I incorporate the active learning strategies that I do in class to help them overcome barriers to their learning. Students are so worried about getting ‘it wrong’ that they end up stopping themselves from the ability to ‘get it right’. I encourage students to see our classroom as a low stakes environment to get it wrong so that in a higher stakes environment (like an exam) they will then reap the rewards of taking the challenge and be willing to risk speaking up in class. I remind my students regularly that we often learn a lot more from our mistakes than from what we got right the first time we tried it. I think that our collective circle of niceness supports an environment where taking calculated risks improves the learning experience of students.

6. *Learning is an iterative process*. At Augustana I teach many students multiple times and have the opportunity to observe their growth not just within an individual course but from the first class they take with me through to the last course, while these students are simultaneously helping me to continue to reach my potential for excellence as their teacher. As a life-long learner, I am continually reflecting on how I can improve my pedagogy and hone my teaching and learning skills towards enhancing my students’ success. I try new ideas and concepts learned at workshops and conferences with enthusiasm...for example, I have dramatically transformed all of my course syllabi so that they are appealing foundational documents that students actually want to read and engage with. My long-term ongoing goal is that I engage students to discover ways to experience multiple ‘wow’ factors during their time in my classes, and that my caring nature, passionate energy, and enthusiasm for what they are learning helps get them there.