

**CATHERINE
DRENNAN:**

One of the big challenges of a large lecture is having the graduate student TAs be really an integral part of this. And I think if the grad students TAs are not that excited about this teaching excitement, it's not so good. You want to have this sense of enthusiasm and energy.

So one of the problems I had when I was first starting with this is that this TA assignment was not the most popular. So when the grad students are coming in in their first year, there are organic chemistry grad students and they want to teach organic chemistry. And there are physical chemistry students who want to teach thermo and kinetics. Biochem students want to teach biochemistry, and inorganic chemistry students want to teach inorganic chemistry.

So who is there for general chemistry? And so often, it would be the booby prize assignment to get stuck in that class, and there might be a feeling like, oh, I got stuck because I wasn't the organic chemistry professor's first choice. So I wanted to change all that because to me, teaching freshmen in freshman chemistry is the most fun teaching ever.

So I knew there were grad students out there that could engage and agree with me that this is going to be a lot of fun. I admit, it's more work than all of those other courses, but it also can be more fun. So I thought, we just need to get the right people in and I need to educate them about what this experience can be like.

So I decided to once the students were accepted to come into MIT, I would send them an information packet about how they could be part of this exciting teaching opportunity, and I made it glossy and pretty and sent it to them and asked them to apply to be part of the class. And so we got some wonderful applications. I got a great group of people to be part of this class. So instead of being like, oh no, I have to do this, they're like, yes, freshman chemistry.

And we brought them in early, and I got to know the group. We had extra TA training in the beginning. And t-shirts, and by the time we started, everyone knew each other. And it was an opportunity, also, for the TAs to make friends because they're first year graduate students and so they get to know other first year grad students and they build a sense of team as well.

So for many years now when we've been really doing this-- having this extra TA training and applications to be part of the class-- we've started the semester with a group of people who are just ready to go and really excited about being part of that. And I think that has had such a wonderful impact on the course as well. They see this whole teaching team that really want to

be there and are excited about this opportunity and care about each and every one of those students.

And the comments that I've gotten later, both from the students and also sometimes from parents, that their child in their freshman year really felt a connection as part of this class and had this TA just checking in on them, not just about this class, but about how they were doing overall. And it was a support system that went beyond the teaching of chemistry, which made me really very happy.