

**WILLIAM LI:**

Well, I think the first thing to say in terms of tips for educators is to really encourage you or really encourage them to do it. It's a very rewarding experience. I think that the opportunity to engage with community organizations and assistive technology users-- people with disabilities in the wider community, beyond a college campus-- is for us as instructors a very rewarding and exciting experience.

And you also find within the university itself a lot of support and interest-- people who want to bring their own experiences or different aspects of the university that maybe work in assistive technology or Student Disability Services that really get very excited-- or in design, or in engineering, and so on.

And the students themselves, I think it's really a special group of students who are interested in this topic. I think that's really probably the biggest kind of joy of working in a class like this-- the kind of experiences that students bring to the table, the dedication that they bring to the class. So there's sort of a big need out there. There's sort of a big interest from students.

The other core part I would say is, there's no doubt, I mean logistically it's always a lot of work to bring together-- different partners or find people out in the community, and find lab spaces and places to build prototypes, and so on. And I wouldn't even claim that we tried to make it particularly efficient this year. I think to us, particularly given the circumstances and given that we were doing this for the first time, we tried a lot of experiments that did require more time to set up.

That might be one thing to say to that-- there might be more sort of efficient ways to put this all together. But the big thing that I think comes to mind is that it's really the students working with their client-- or it's really the results of this interaction between the students and their client that really motivates students to learn, and to develop new skills, and to put a lot of time and effort into their projects.

I really think that the way the relationship between clients and students is set up really drives the course. It's really the clients that work with the students who do a really substantial part of the teaching associated with the class. So in terms of learning outcomes or in terms of the things that students learn in the class is really big gains, I guess, to be gotten from a setup like this.

**GRACE TEO:**

I have two tips for other educators. I think the first one is, before the semester starts do all your homework as to where all the resources within your school are and within your community, because you have no idea where the projects are going to go and what help your students are going to need. There is no way that you yourself are going to possibly have all the skills to teach them how to do things. So just make as many friends as possible, who are on your side and who are willing to help out the students with their projects.

The second tip is that 80%-- 70% to 80% of the work is all about people management. At the end of the day, you're trying to facilitate students working for a client. And the students are usually novices at this. And most of the trouble that the students have come down to, the client wants this, or the client is doing this, and it's very discouraging, or we don't know how to do this for them. And so being able to facilitate that relationship becomes a big part of the work.

**WILLIAM LI:**

One other tip I would share is really in terms of the setup of the class. I think we really do believe that working with the real clients over the semester is really at the core of this, as opposed to maybe working more theoretically in terms of assistive technology design or kind of a generalized more abstract need. I think what I've seen is that really sharpens the particular need that students identify and try to fulfill.

It certainly motivates students to try to get their project working. And it also just ends up, I think, being just a stronger learning experience for everybody involved-- just kind of that human side of things. So I know there's a lot of moving parts in the class that we've put together this semester. But from what I've seen, I think working with a client, and I think that associated with that is the efforts to identify the right groups of people to work with, I think is really important.

And I think there's some question always about, well, if you work with one particular person, does that mean you sort of overfit to that particular person? Is this kind of product only going to be useful to that one person in the world perhaps? And the answer might be, yes, sometimes. I mean, it's very customized and it works, hopefully, for that particular person.

And intrinsically, I'd argue at least that that's a good thing. But the other aspect-- and I think a student wrote about this in one of the blog posts-- is that I think doing this kind of design for one and making it work end to end really can be a successful way of teaching design or teaching engineering and could lead as well to kind of successful ideas or successful solutions in assistive technology that are applicable to more than one person.

