

Sam: Welcome to the UP Tech Talk Podcast coming to you from the new Academic Multimedia Studio on the University of Portland campus, produced by Academic Technology Services, with your hosts Maria Erg and Sam Williams.

Welcome to the UP Tech Talk Podcast. Today we have with us, Niki Shulz, who is an instructor with the Shiley School of Engineering. Thank you, Niki, for joining us.

Niki: Thank you for having me.

Maria: Niki so nice to have you here, and we wanted to hear all about your experience, your recent experience with Salzburg. And I know it's got kind of a timeline involved, and can you take us, first of all, back to the beginning when you first found out that you were going to be teaching this course.

Niki: Ok, so last, last year, so probably in the early fall term, I was asked to, if I would consider teaching 2 of our sophomore level engineering courses online to students who'd be studying in our semester program, during our spring semester in Salzburg. So, this would allow us to have an engineering spring term, where students could go for the entire, the full semester. Prior to that, engineering students were really limited to a 6-week summer term, and we still have that program, and that's great, but we wanted a more in depth program for the students who wanted that greater cultural and language immersion. And, but to do that, they would, we didn't want them to get off track of that for graduation for an engineering degree. So, we really needed to offer two engineering courses, and sending an engineering professor over with prohibitive, prohibitive finding someone locally in Salzburg to teach and engineering class, didn't seem feasible, so I was asked to develop a couple of online courses. And I said I'd do that, and I started working on, on two online courses for Salzburg. I was teaching in Salzburg during summer term last summer, so that was summer of 2014. And, when I got there, I had been told that the computers and the Internet at the Salzburg campus were sufficient and that things would be ok. And I got there, and there's an 8 terminal computer lab, and there's an instructor computer in the classroom, and another one in the faculty office. But, the Wi-Fi was really non-existent. It would work for a day, or a few hours of a day, and then I think at the worst it was gone for 3 weeks. And...

Sam: Well I also heard if one student got on to Skype or something, it would take like the entire center down.

Niki: Exactly, it was, when it was working, it was slow and pretty awful.

Maria: Did you have any clue that it was like that before you got there?

Niki: We had some students that had said that it was, it was bad. So we knew that it was a potential, but we also had the, had people that said it was fine. I think they were just kind of saying the students maybe are...

Sam: It was adequate for general use possibly.

Niki: It was adequate, yeah so I think we had, we had some folks that weren't using the Wi-Fi and the computer lab themselves, who maybe weren't taking the students as seriously as they ought to have been in reporting the actual conditions.

Maria: Yeah.

Niki: And it was, it was obvious that I wasn't going to be able to teach an online course. If I had tried with what we had that summer, we would have been on for 10 minutes, and then had the Internet crash out on us, and have to have the students go through all the logins to get back on, and it was just, it was ridiculous to think that students would actually put up with that, or that I would. And so we started looking for alternatives, what we were going to do, because this isn't going to work. The first thing we did is contacted Sam and said, hey, what can we do?

Sam: I remember the conversations a little bit, because, I have never been to the center and none of my team have been to the center, and we're trying to help as, you know instructional design and assistance, kind of behind the scenes, and I remember emailing and saying, hey can you give us an idea of what you're experiencing there, and it was, you provided us with you know nice detailed analysis of the center, and I think that was really appreciated on our behalf. Because, part of that instructional design process is you want to know the context of that learning, like what are they experiencing at that location. You know, what is the Internet like, what kind of computers do they have, and so, you being able to be there, I think was really key in us being able to advocate to the campus for improvements in Salzburg.

Maria: Yeah, a huge help.

Niki: Good.

Sam: And so I think, again thank you for, you know

Niki: You're welcome.

Sam: Being able to give us that great feedback, because if not, it becomes that anecdotal, you know that, those stories.

Maria: You know it was ok for me.

Sam: And so, and then we were able to take it to the next level, which was a huge overhaul, of the entire center. Which completed this last fall. And so, kind of moving forward a little bit, so you were able to, so you're plan, but we had to go to a plan b though.

Niki: Yeah, so we weren't, you were able to get in place the revisions to the center and from my experience now, it's great there now. But in the mean time, we weren't certain we'd be able to get the instructional technology up to speed, the labs updated in Salzburg in time to teach a spring semester course online. So, we went to plan b, and what we ended up finding was another university about an hour away by train from Salzburg, that the engineering students, there's 3 of them studying this semester, and they take a train to the Upper Austrian University in Wels, Austria, it's a 55 minute train ride, and then they walk from the train station to the university, and they take their engineering courses actual in English at this technical university, and there's 4 other international students that are, that are in the course with them, which is kind of nice, because they're getting a good international experience.

Sam: Definitely.

Niki: But, because of the differences with our semester schedule, and the Austrian academic schedule, they're taking these courses on a condensed term, and they're pretty difficult courses, so they're taking them in a 6 week term, they're also taking them once a week for five hours...

Sam: Oh wow.

Niki: For that 6 weeks to get the, so it's a, it's a little bit difficult for the students, and so to support that, I meet with the students twice a week online, and so we meet on Web Ex, and we video conference. And just, for the state of the center now, it's great. I mean our video conference, I can't even tell that there's a time lag over the ocean when we're talking, I'm really surprised by that.

Sam: Oh that's awesome.

Niki: And the students have no, no issues accessing the technology and I don't have any issues working with technology, and so, I'm able to provide basically tutoring, 2 hours of face to face online tutoring a week, and I give them quizzes and activities that we use in class here, and we talk about how they're doing, and try to keep them up with their studies in Welz.

Sam: So with the, so you said you used Web Ex, I believe when we were talking you said you were able to use the whiteboard in Web Ex as well? Or have you moved away from that, or is that, are you using any functionality in Web Ex with your students?

Niki: Well I'm learning about the functionality of Web Ex, while I use it.

Sam: Ok.

Niki: So I'm sure there's some other stuff I'll discover, but right now, the way that Web Ex works is you get a little, it's a video conferencing tool, so I can see the

students and the students can see me, and then we can talk. And, additionally it has ability to share your desktops, so that I can, they can see my desktop, and we can actually annotate on that. We can use the mouse and draw, and then there's also a whiteboard tool within Web Ex, and so we've been trying a few different things. One simple thing is just opening up a whiteboard and as we, as we talk the students can be writing a formula and I can be making changes or we can be working on a sketch together, to diagram a problem. And we can use different colors, and then the nice thing about the whiteboard is that everything we write on the whiteboard at the end of the session, I can save it. It's a PDF document, I post it up to Moodle and the students can access it after class, between sessions. Yeah it's been really nice.

Maria: So it's pretty much meeting your needs, or did you have something else in mind that you'd like to be able to do?

Niki: It's great for what it does. It's a little awkward writing formulas using a mouse, and having it appear on the screen. Our handwriting is horrible. But, it's adequate, especially for the number of students, with just 3 of them that I'm interacting with. I think it works great. So, I can't imagine too much more, I mean, I'm also recording the sessions, so Web Ex has a way to, you just hit record at the beginning of your session and it creates a video of the entire time it's capturing what you both are writing on screen, and it's also capturing your video feeds, so I'm seeing, I can see what the students, how they're looking and they can see how I'm looking, and that's all on the video feed. We can also hold up objects, the nice thing about the video is we can hold up things, and we can manipulate things and talk about them. I think we'll probably use that quite a bit in the second course that they'll take at the end of the spring term, where we talk a lot about physical objects and deformation of materials so we can actually bend things and break things and look at them. And we can do that over the video.

Sam: Yeah we'll have to, we don't, I believe we added to the center a document camera, and we'll have to verify that for sure. But we should be able to get video feed from a document camera as well as a secondary camera, so we'll have to look at that, because that way they can put objects under a document camera, you can put objects under a document camera so we'll, we'll test with that next and see.

Niki: Well with a document camera we'd be able to maybe write on paper on the document camera, and

Sam: Yep.

Niki: And see things.

Maria: Yeah.

Sam: So we'll have to test it out. There are some other things, I have all kinds of crazy ideas, but, I love crazy ideas. So I'm curious, so you're using Web Ex as part of

it, so you mentioned quizzes and stuff, so are they doing other online kind of stuff with you, like the quizzes and stuff? Or is that, I mean how are you delivering some of the other content?

Niki: You know I've kind of had bad experiences myself with online quizzing tools, for the type of the things that we have to do in engineering where we have lots of pictures, and mathematical formulas that we're manipulating, and maybe multiple answers that are possible. And I've just found that making the quiz, to do what I want to do, takes so much time, that I'd need to use that same quiz all the time, and I don't like to re-use assessment tools like that, so I tend to do paper quizzes, and so all I do is I send the students there, whatever we're working with as a PDF file, and then I can open it up as a PDF, and we can do two things. We could share my desktop, and they can write on it, and I can write on it, and we can do stuff. Or I can copy part of it into and paste it into a whiteboard, and so I can have a diagram from the quiz, on the whiteboard, and then they can, they can write and manipulate it. I'm mainly doing sort of group assessment,

Sam: Oh ok.

Niki: a lot of discussion with them, because the primary assessment is being done in Welz, so I'm not grading them. There are no graded things, it's more

Sam: Oh ok.

Niki: do you understand this, where are the sticky points, do you really get this as well as you think you do. So, that's that.

Sam: So live quizzing, and that kind of thing. So that was my question.

Niki: Yeah live quizzes. Yeah it's more like oral, it's not really exams it's more of a discussion. It's really sort of different than what we do in a classroom, where it's a lot of me presenting, it's yeah; it's a discussion that we're having. Which is really nice.

Sam: Yeah definitely, and it's manageable, with that size. So it's probably not something that you could replicate with a larger class.

Niki: No, it's really nice, yeah it's really nice, yeah this term to only have 3 the first time we're working with technology. The plan is next spring semester, that we'll probably be at maximum capacity for engineering students in Salzburg, which is 8. And that's going to be, again manageable size, but it's a scale up. It's not going to be, the things I'm going to be doing with 3, I can't do with 8. So

Sam: So we'll have some fun things to think out with that one...

Maria: And what feedback have you gotten from your students so far about their experience?

Niki: Well it's pretty early in the process. We've had, this is week 3, they're going to have their first exam in Welz this Friday, and so far, you know they say, you know thank you this is really helpful, but you know, I'm

Maria: See how they do on the test.

Niki: Thank you, exactly.

Sam: So are they taking other classes there too? So they're doing this 1-day a week, but they're taking other classes I'm assuming.

Niki: Yeah they're taking their regular classes at the Salzburg center. So every student who studies in Salzburg takes a German language class, and then there's other courses that meet their core requirements, and I believe they're taking like a fine arts class or theology class I think or something like that. So the, and most the students that are there in Salzburg are there for the, there's 40 or so students that are there for the full year. And so there's a full curriculum, taught by local instructors in Salzburg there, they're Austrian instructors that teach at our center. And, now with the semester program, there's a cohort of I believe nursing students who are there fall semester, and they come back and are replaced by engineering students in the spring semester, so we're able to get some better international opportunities, a little more in depth international students that have these more specialized programs where they, they really can't get off track. There are certain classes they have to take their sophomore year or they're not going to be able to graduate on time.

Sam: So as, so as we're moving forward, so we're going to bring on 8 additional students, so are you going to continue with this hybrid situation where they're going to be taking classes there, or are you eventually going to be teaching the class fully from the UP

Maria: From the Salzburg, yeah.

Niki: That is yet to be determined. Right now the partnership with Welz is maturing in ways that, to mean more than we just have students that are taking a semester program, we're working on a exchange partnership with that university where our students can take classes there, and they'll, they can send some students to the Shiley school to take engineering classes here.

Sam: Wow.

Maria: Oh nice.

Niki: And potentially, we may have senior capstone design experiences where maybe we have some students working at the university in Welz with a team here in Portland. There's some really interesting opportunities that might develop if we continue with the model that we're using this year. But, we still need to see how it works, how it works for the students, you know what are our actual outcomes that come with the end of this semester.

Maria: Yeah, I would imagine not having a 5-hour engineering course would be

Niki: Yeah.

Maria: Pretty welcome

Niki: Yeah, but it would, these are also really hard classes so teaching them online has, you know there's some limitations there, but we're doing really good with group interactivity and stuff, so.

Sam: Well and that sounds like it's an amazing opportunity for students on both sides. The international, because I know it's a, here at the university they're looking at the internationalization of our curriculum, and our programs, so this just goes really well with that kind of vision as well, so I'm excited to see how this matures and how we can use technology, and keep pushing, pushing the boundaries with the technology.

Niki: Yeah for engineering it's really nice because it's not very often that an engineering program is able to offer study abroad, a program for students because the curriculum is so limited. There's really not a lot of time in an engineering degree to take a foreign language, and then again get off track on your degree if you just go study, and can't take an engineering program. And then the engineering programs in different countries look quite a bit different. So, the way that an engineering program looks typically in Austria or Germany, you're coming from a technical high school where you've already had a lot of calculus and physics and you're at sort of a different level. The technical universities are generally not teaching any core type courses, there's not writing, there aren't courses in theology. All the things that we insist that our students have for breadth, which is really good, is it's just a very different model in Europe, so taking and just putting a sophomore student in a sophomore course in Europe is probably not going to work for the student or for the university that they're sitting in. So, these sorts of hybrid opportunities where we can provide opportunities for students to partner with foreign universities and groups, or to get part of their instruction here while they're getting part of their instruction there. It just opens up opportunities that weren't available 10 years ago. And technology is really key, for that to be able to work.

Sam: Well I know we're, you know within Information Services, we're really happy that we were able to assist in making this happen and we just look forward to seeing what more we can do in Salzburg.

Niki: Me too. Well thank you for making it happen, because it's, what I'm seeing this semester over last summer when I was there, is just, it's light years apart, and it's fantastic.

Maria: Yeah we're glad to hear that.

Sam: We'll have to get some student feedback at some point on

Maria: Yes when they come back that would be great.

Sam: the experience.

Niki: We could podcast with them in Salzburg taking

Maria: Oh

Sam: Yeah

Maria: Fun, what a great idea.

Sam: Again we'll have to figure that out. I do have a device that we can hook up to all this

Audio Guy: I'll fly there.

Sam: Our audio guru over there says he will fly there. So yeah, well thank you so much for coming in today

Niki: Yeah.

Sam: and telling that story, and getting that information out to the campus.

Niki: You're welcome.

Maria: Thanks Niki.

Sam: Thank you for joining us for another episode of the UP Tech Talk Podcast. Just a reminder that we post a new podcast every Friday morning, and you can find us at [techtalk.up.edu](http://techtalk.up.edu).