Jamie Oberdick:

For Teaching and Learning with Technology at Penn State, this is Jamie Oberdick with the February edition of Conversations, the Senior Director Eye View of Education Technology at Penn State

For our conversation this month, I talked to Cole Camplese, senior director of Teaching and Learning with Technology, about how technology has changed libraries. Libraries are not dead because of technology, far from it, and proof of this can be found in the new Tombros and McWhirter Knowledge Commons in Pattee Library. The facility combines learning spaces and technology to create a cutting edge educational facility. I talked to Cole about a class he is teaching in the Knowledge Commons with his colleague and Penn State faculty member Scott McDonald, the role of libraries in the modern world of education, and even how technology is making the library a much more active and yes, noisier place.

Jamie Oberdick:

Okay, I'm here with Cole Camplese. Cole, talk a little bit about how the class you are going to start teaching and where you will teach it, because that's also quite interesting.

Cole Camplese:

It is interesting. Okay, the class I am teaching, and I co-teach it with Scott McDonald, who's an associate professor of science education and curriculum instruction. He's also the director of the new Innovation Studio in the College of Education, which is a really interesting endeavor which in a future podcast maybe we can talk about.

So the class is - they changed the number on us this year, it's now CI598, it used to be CI597. It's called Disruptive Technologies for Teaching and Learning, and it's a graduate seminar. In the past we've had 24 students, last time we had 18. Interestingly enough we have eight students enrolled this time, so it's interesting because it's forced us to rethink our design. Because we've always done these big team things where you can have four or five different teams working on projects, but now we are only going to have two teams.

We were going to be teaching in Chambers, in the new Innovation Studio classroom, but there were some problems with the air handlers, so we won’t be able to be in that classroom until Spring Break. Which sent us scrambling at the last minute because we have some unique technology needs. It’s not like we need all the students to have computers in front of them all the time, because the class is really more about
community identity and design and reading and discussing and things of that nature. But we do talk a lot about technology and we needed some things, but we couldn’t find a classroom.

We ended up asking folks at the University Libraries if we could use the new classroom in the Knowledge Commons. Which is in the Pattee side of Pattee-Paterno Library. It’s beautiful. If you’ve not been over there, you’ve got to go. I was there yesterday to get a tour of the classroom and everything. TLT has invested amazing time, energy, effort, and resources into it. I mean ITS in general. This has truly been an amazing partnership with the libraries.

We walked into the classroom yesterday and it’s really wild. The classroom is designed very differently. The interesting thing is the class is also going to do an expose on and really expose the notion of physical learning spaces as it relates to the confluence of technology and its influence on community, identity, and design. And design specifically around teaching design.

So, what’s crazy is you know we’ve been watching over the last 6-12 months the Occupy Wall Street movement. And Scott and I started to think; last semester there was an article right at the beginning of the semester from Onward State that listed the ten worst classrooms on campus. And so Scott and I started thinking about that and started thinking about the context of Occupy Wall Street. We started to think about how could we have our students switch from focusing exclusively on the connections between technology and disruptive technologies, emerging technologies and their relationship to community and identity and design, over towards physical space. So virtual space is part of the teaching and learning environment, but traditionally and historically, physical space has been a bigger part of that.

And so, we’ve decided we have a big component of our class that starts in the fourth week called Occupy Learning. What we’ve done is we’ve identify what we thought were the 10 worst classrooms on campus, and the 10 largest classrooms on campus, and we’re sending our students out to collect artifacts about those rooms. To do observations around what kind of teaching goes on in those rooms; talk to students and interview them, audio and video; talk to faculty via audio and video; take photos of them; and write little mini reports.

So all these rooms will have their own little mini report. And then they will be placed on a map, geo-tagged, all these little artifacts, like digital posters if you will. And then teams will have to talk about those, what they learned and about this space design, and how it influences what kind of learning and what kind of teaching goes on these
environments. So we’ve taken our traditional course, which has always been very heavy on the research side and the readings and the conversations always have been very high level, then we mix technology in there. We are also going to add in there this idea of physical space design and how it influences teaching and learning. It’s going to be a relatively ambitious but really engaging experience.

Jamie Oberdick:

Was this something that the University itself kind of looked at and maybe learned more about how we can redesign these spaces?

Cole Campese:

So, as you know at TLT we have Classroom and Lab Computing, so we have heavy influence in what happens in our classroom and labs. And one of the things....I sit on UCIF, the University Committee on Instructional Facilities, and one of the things we are talking about doing is taking these final reports and inviting UCIF members to them. So they can see first hand graduate students dissecting these learning environments and talking to us about what kind of pedagogy do they support, what kind of activities they support, what kind of teaching practice they support, what they could be thinking about to challenge the traditional notion of the classroom.

So I think it’s really going to be kind of interesting, it’s a little risky for me as someone who is an administrator and I am actively promoting the critique of the environment that I myself design and oversee. But I think it’s a critical step for thinking about what comes next. When I came into this position a year ago, I sat down with Kevin Morooney, our CTO and vice provost of information technology, and I asked him what are the 3-5 things I need to focus my energy on. Basically, what do I need to do to not lose my job.

The items on the list really surprised me. Course management system was one of them, keeping that active, engaging, and running. Printing - thinking about where printing goes. Printing is a huge cost for us. It’s also becoming an outmoded approach. You talked to a student of ours, Zack, about the iPad and the way he used an iPad to overcome just an unbelievable amount of printing costs. So printing was one of them. What was interesting was Kevin wanted me to have a plan for 3-5 years - what does the computer lab look like? What does the classroom look like? Should we be continuing to put 200 Windows machines in a big room where everyone sits down to do work. We’re not sure about those things.

So part of the idea of this class is to help inform my own practice. So, you hear a lot of
people say my research is my teaching, but also in this case, the teaching becomes a component of the research and it informs practice. And it's really the reason why I continue to teach. I mean, I literally have no time to teach, but if I didn’t do it, I would lose touch with what's really going on inside the classroom. So of course it informs. Every time I teach I learn something new about what it is I do here at the University well, and I learn probably 50 different things about what we do here at the University poorly, and we actively work to address those things.

I think there’s no better way to that than firsthand. We do a lot of surveys here. But in my mind a survey never really contextualizes challenges and issues that you have the respondents reporting. You know what I mean? You have to live it. I can remember you going to visit different parts of campuses for different stories you’re working on, and saying “that’s incredible, I can’t believe we do this at Penn State.” But you don’t get that unless you actually go out and talk to the people who designed the space. Or live in the space. And the same holds true for our teaching and learning environments.

Jamie Oberdick:

Now, one thing - speaking of environments, the class that Scott and you teach, is in a really interesting environment. Talk a little bit about that.

Cole Campese:

Well, it's in the Knowledge Commons classroom. Interesting, we partnered with the Libraries on this space. Chris Millet, a member of Education Technology Services and a member of the design group that put it together, the room really supports different types of classroom activity. The room is organized in an X - there’s no fixed podium in the room, so it's very very different from what we’re accustomed to. It has a movable podium in the front, it’s organized in an X - there’s five screens in the room you can project to, so there’s always a view.

So, if you think about an “X” and I’m the instructor and I am standing in the middle, in a traditional room there would only be projection in front. But now if I’m sitting in X and I’m looking to the middle there are screens behind each leg of the X as well as the middle so no matter where I’m sitting, I'm looking at both the instructor and the content that’s being presented. Whiteboards all around the room, so the idea is to break people off quickly, talk about a topic, and say okay, let’s move from passive mode to active mode. Turn your chair around, there’s a wall of whiteboards there, I want you to organize that. Then there’s a screen right next to you so you can hit a button and switch and show what you want to show over there. So you move students very quickly from sort of
passive engagement to active engagement.

And so part of what we are trying to do, Scott and I, it’s funny because we have librarians who are going to sit through the class to observe the kinds of practice we use in the room. To see how we actually take advantage of the design of the physical space. Because this space is designed pretty much around the concept that Steelcase has been talking about for many years, and that’s this sort of active classroom engagement. I traveled to Steelcase with Scott last spring, and we sat through a demonstration of how you would actually take advantage of this space. It was really intriguing to watch this master teacher, who understands this environment, go from lecture to having his students engage in an action to bringing them back together to mixing up their teams, everything movable. The chairs are on wheels so you can move around quickly.

It’s a radical departure from what we typically do. What we typically see is, Jamie, you’re the instructor, you stand in front of the room at a podium in a position of power, you click your mouse button and you change those slides up there. Now we’re going in this whole different direction. The other thing the room has is a computer that can project but then there’s an iPad in the room. And the iPad is really a giant remote control for the computer. So not only can you run your slide show from there, but if you try to imagine that my iPad has the same screen as the Mac on the podium does. And so, I can tap on Safari, and it doesn’t launch iPad Safari, it launches Safari on the room machine. Then I can tap a toolbar and it comes down so I can choose different tools. So that I can annotate the Web if I want to.

I can play a Youtube video and I can say okay now what are the five biggest things that we took away from this. And right on the Safari screen I can write on the video and then record that, and play that back as a standalone movie if I wanted to. So I can embed that into a blog space or ANGEL or something like that. We don’t quite yet know the full affordances of the classroom but that’s going to be part of the fun. So we have this emphasis on space design and disruption and all these other kinds of things. And we’re going to be in this room that no one’s ever taught in before.

I mean, Scott and I were in the room and we stayed an hour after our meeting yesterday from 5 to 6 to do some design work on the course, and it was sort of kind of crazy because we were like, man, we’re the first people to write on these whiteboards. So we are breaking this room in while at the same time retraining our own brains around the kinds of teaching practice that we are going to engage in at this space. We’re looking forward to it. It’s going to be a big challenge but it’s going to be a lot of fun.

Jamie Oberdick:
That’s really interesting to me that change in the room design is so radical that it’s helpful to be in the classroom to do the planning. That’s pretty unusual.

**Cole Campese:**

That’s a really interesting insight, you know, I never thought about that until you just said that. But Scott and I needed to be in that room to be able to chart how we are going to address some of the challenges. Just because there are screens everywhere doesn’t necessarily mean you want to use them all. And so we were even talking about okay, where do we think we are going to position ourselves in this room. Because even in our previous semesters when we taught in 236 Chambers which is a departure from rows, but it’s a U-shaped room. Scott and I always sat up at the front right of the classroom and didn’t really stand up and present. We just sat and talked.

This room challenges that notion. Even being in that room we thought about how we are going to structure the physical location. Where did it make most sense for Scott to set up relative to me, relative to the eight students in the room, relative to how we have two librarians, Chris Millet and his GA are going to be there to watch how we are going to use the space. We have Ryan from the Media Commons who is going to be there watching and observing. So not only do we have the eight people in the class, we have at least another five people who are going to be like these somewhere between active and passive participants. What’s funny is Chris Millet took this class when I taught it two years ago, so Chris has been through this class. So, I’m personally curious to see if he can control his urge to participate in the class. We invite people to participate. I’d love to have 20 people in the class, it’s just that we have eight.

But we’re going to be using online tools as well, we’ll have a Twitter hashtag, we’ll be Tweeting out different things and people can follow along.

**Jamie Oberdick:**

It’s a great mashup of virtual and physical.

**Cole Campese:**

That’s the goal. We’ll see.

Scott and I always have called this class the grand experiment. Every semester something blows our mind. And every semester we learn so much by going through this
process of delivering what we have once done, redesigning on the fly, reflecting on what was good and what was bad, and rethinking the entire thing on the other side.

**Jamie Oberdick:**

So how do you sell something like this to a faculty member who might be skeptical? 16:39

**Cole Camplese:**

You mean like the class? The physical design of the class?

**Jamie Oberdick:**

All of this, all of this change, why it’s important.

**Cole Camplese:**

Well, it’s interesting. The class Scott and I teach is always very well received. Not just by students but by our colleagues. And, we’ve not taught this class and not had other faculty from other colleges and departments come and just sit and observe to see what’s going on. But I think that there’s something about the time that we live in right now that makes it interesting and a novelty. We’re not quite at a point where people are embracing this whole new design because we’ve not yet done enough of the work to understand the kind of practice you need to be in that space. Part of the work that Scott and I feel like we’re doing...the scholarship side of what we’re doing, aside from the teaching, is unpacking the affordances of room designs like that so we can better understand it.

I can imagine that Scott and I will probably write an article on the other side of this about the way the physical design of the space impacted the course. Just like we’ve written articles about how the virtual and the technology tools have impacted the course. So we taught the course the first time we were asked to write an article about what does disruption mean and what are the kinds of technologies and what are the trends you are seeing that are disrupting traditional teaching practice. We were able to talk about user-created content and multichannel discourse, and collaborative knowledge creation. We were able to talk about all those kinds of things because we saw, through the use of Google Docs, we saw through the use of Twitter, we saw emerge almost organically in the class as students took advantage of technologies in ways that they typically do in a social setting but within a learning setting.
We really leaned heavily on the concept of learning as a social enterprise. So now I have a feeling that what will come out of this is all these artifacts about the learning spaces. And the traditional learning spaces as they relate to these new learning spaces, and what the design in the middle has to look like to get from “sage on the stage”, stand in front, to this notion of active vs. passive and the mashup of that. I used the word “versus” there and I probably shouldn’t. It’s active AND passive engagement. And the ability to switch those modes like that. To go from let’s talk, as the person with the knowledge, to the people who are trying to gain it, to now, ‘what do you think, let’s talk about it, go illustrate that.”

But you need physical space to allow that. But you also need to have a sort of a willingness to turn that loose. What that will take is people writing about it, people talking about it and I imagine there will be presentations at the Symposium about it. So, it’s a little bit about the theme I am hearing out of ETS these days around flipping the classroom. That’s what Scott and I are attempting to do, but we’re attempting to document it and to create tangible artifacts of what it looks like to do that.

It’s a little bit of a building off of Chris Long and I’s project called PSU Hack, we talked about that a couple of Summer Camps ago, about what does it really mean to hack traditional pedagogy. It’s not a negative thing, it’s a really interesting and positive kind of opportunity.

**Jamie Oberdick:**

You know, one thing I am hearing from this, often times when I am hearing something about educational technology, even in the Chronicle of Higher Education, I will see in the comments section ‘well, we can’t use every single new toy haphazardly.” I think that there seems to be a lot of thinking that goes into this, it’s not just oh, this is awesome. It’s about coming up with how to use it effectively.

**Cole Campese:**

My claim is, that, these technologies that we’re all using in our everyday lives...primarily social softwares like Twitter, Facebook, now Yammer, Google Docs. These tools that we use to support the work flow of our lives, and the work flow of our day-to-day enterprise, the work we do....Actually if you unpack them they have embedded pedagogies in them. They allow you to rethink the way we do traditional teaching. And it’s not about “Oh my God, Google Docs is the greatest thing ever, let’s use it.” It’s building an awareness of what it can enable and rethinking the kind of things you do
with your students.

I have to honest with you, I get a little tired of people who say, oh, we just go after the shiny new toys as educational technologists. If you are doing that, you’re doing it wrong. Because we don’t go after the shiny new toys without at least a relatively decent level of understanding of a handful of embedded pedagogies. Scott and I didn’t sit down in 2007 and 2008 and say “we’re going to use Twitter because it’s neat.” We used Twitter because we observed changes in the way audiences were participating with speakers. We’re looking around at conferences and seeing Twitter streams and hashtags of people asking questions of each other as the keynote speaker was going on. We thought “that’s really interesting.”

So basically, what we are going to do is let people use their machines to be active with one another as learning is going on in the room. Because remember, we’re leaning on this principle that learning is a social enterprise. So, it wasn’t like “oh, Twitter’s groovy, let’s use Twitter.” No. Twitter’s going to open up a whole new channel. The back channel at conferences? Well, in a classroom it’s multi-channel discourse. I can raise my hand and talk and I make that comment, you can sit in the back with Twitter and say “@colecamplese, that was a really great comment, have you thought about this?”

And now, you’ve added another layer to the discourse in the classroom. It has nothing to do with Twitter’s neat. Twitter is just an enabler of another form of pedagogy. But you have to spend time in a classroom actively exploring and unpacking that to get there. And those people who dismiss this stuff out of hand as “shiny new toys” are missing the boat. Education technology is a field, it’s not a hobby. This is a field. And the more we understand that there is a scholarship to what we do as educational technologists, the sooner we can get over this BS that “oh, you’re just chasing toys.” If that’s the way you feel, you’re in the wrong field. You’re a hobbyist.

You could say the same thing about molecular biologists. “Well, they’re just chasing the new whatever.” No, that’s their field. Their job is to unpack cells, their job is to understand. Their career is to create new thought from old. We’re in the same thing, we just do it in our field. And that’s why the Chronicle comments frustrate me, and some of our colleagues frustrate me, and you know I hear this all the time - “you should be putting teaching first, not technology.” Well, okay, but that’s somebody else’s field. Our field is to unpack the technology, to support these practices. At least that’s my opinion.

**Jamie Oberdick:**

Well, I think that’s a great place to leave off. Cole, thanks for your time.
**Cole Campese:**

It’s been a pleasure.

**Jamie Oberdick:**

For Conversations, this is Jamie Oberdick. Thanks for listening.

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