

Bonni: [00:00:00] On today's episode of Teaching in Higher Ed number 106 Mike Cross is under cover professor.

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Bonni: [00:00:19] Welcome to this episode of Teaching in Higher Ed. This is Bonni Stachowiak and this is the space where we explore the art and science of being more effective at facilitating learning. We also share ways to increase our personal productivity approaches so we can have more peace in our lives and be even more present for our students.

Bonni: [00:00:46] The headline in The Chronicle article said this professor enrolled as an undercover student and talks about a chemistry professor at the Northern Essex Community College in Massachusetts. And this empathy that Mike Cross was able to gain by taking on a role of student in addition to being a father of three kids and being a professor himself and I am just so excited to be able to get to follow up with him today and discover a little bit more about what he discovered when becoming a student. Mike, welcome to Teaching in Higher Ed.

Mike: [00:01:25] Thanks Bonni. Glad to be here.

Bonni: [00:01:27] I'm so glad you could join me for today's conversation. And I'm I'm first wondering what was it that was the impetus to you deciding to take on the role of student.

Mike: [00:01:39] Well every fall or actually at the end of every spring we have a big kind of awards honors ceremony for all the students that are receiving awards and so forth. And you know I go every year and I was sitting there on the clock and for people and I was thinking how great it was because you know some of my students were walking across the stage. I'd gotten to know a few of them really well and knew how much they were going through in all of jobs and the family. And you know so many things and I was thinking that's pretty

incredible that they're able to juggle all of that on top of you know getting honors awards and so forth.

Mike: [00:02:17] And I was trying to think you know when I was a student it was a bit easier. You know I was fresh out of high school a traditional student you know part time job you know kids and so forth. And so I thought hmm I wonder how I could actually understand what it's like to be a nontraditional student with so many things on my plate and I thought well the only way to actually you know experience it is to experience it. And so the very next day I got my transcripts to the advising center sat down and started the whole process.

Bonni: [00:02:50] I mentioned to you before we started recording that one of the books I absolutely loved reading was from Rebekah Nathan and it's all the way back in 2006 she wrote a book called "My Freshman Year" and she goes undercover if you will and actually goes and lives in the dorms. And I mean serious undercover there and now you have that story. One of the things I remember her really being surprised by and this is incredible to me back in 2006 was just how networked the students were in terms of even coordinating around parking spaces. And you know I'll pick you up at such and such a place that that was a surprise and I think that's 2006.

Bonni: [00:03:31] I imagine today - 2016. What were some of the big surprises you had about here we are 2016 where you were really jolted around just how different it would have been for yourself as maybe even a traditional undergrad going back to school?

Mike: [00:03:48] Right. Yeah I mean I think the biggest surprises for me was how much of kind of a support structure there is. You know in many cases like at Northern Essex we you know we have advisors who kind of guide you through the whole process. You know they are helping you to make sure that you jump through all the hoops and hurdles and so forth. When I was a student I was at the University of Utah which is a major research university and there wasn't as much of that. You know it was kind of like well you register for classes you figure out what you need and if you need help you kind of go in and kind of get a little bit of support so that that was a big surprise for me.

Mike: [00:04:29] I was definitely surprised at how much technology has really played a major role in education nowadays compared to when you know the Internet was just coming out when I was a student and so to you know to see students where you know they have a question and they literally just pull up their phone and down they you know can research things right there in class. That

was as you know pretty amazing to me you know obviously as a professor I kind of see the same thing. I didn't always know what they were doing because as a professor you are standing up there. You see them pull out their phone. You think they're checking Facebook or whatever.

Mike: [00:05:06] Whereas as a student I'm sitting next to people I kind of glance over and see that you know sometimes they are checking Facebook but sometimes they really are using the technology to enhance their learning experience in the classroom.

Bonni: [00:05:19] Were there any tools that really blew your mind in terms of having access to them as a student today and think hey man if only I'd had this back back my initial undergraduate days I think the biggest one was easy.

Mike: [00:05:33] So I've always hated writing bibliographies or work cited. But you know I have my old handbook that I'd pull out as I was writing research papers. You know now as a student and I'm sitting there muttering to myself like is it a semi-colon is it a comma. You know the APA, MLA, ASPCA, I have noidea and my middle school daughter is sitting there at the table and she's like why don't you use Easybib. And I was like what what are you talking about. And she showed me how it does it all for you would say it's everything for you just right format. That was probably the biggest surprise for me.

Bonni: [00:06:08] There's a lot of discussion on mine today about handwritten notes versus taking notes by laptop or some other means. How did you go about taking notes and how effective did you find it.

Mike: [00:06:22] I'm still totally old school. I do everything by hand. You know I show up the first day with my binder and my window put paper highlighters and everything. That's what I've always done and that's what I continue to do. I saw the I was kind of in the minority nowadays. Most students would either pull out a laptop iPad or something. And I saw a lot of students that would record things which you know was kind of anomaly Back when I was a student every now and then someone would have an actual recorder they'd put up at the front. Now it's so much easier. They just put on their cell phones.

Mike: [00:06:57] Also I saw and I seen this is a professor as well but as you know especially as a student you know my professors would post something on that or play something on the board or I was on the board and you know students would just take a snapshot of it with their phone.

Bonni: [00:07:12] Tell me what a typical week looks like for you during this process.

Mike: [00:07:19] Let's see, a typical week. Let's see. So get up my wife and I have three kids middle school to an elementary school. And so you know I'd get up you know get ready to go. Probably about 6:00 a.m.. Dropped my daughter off at middle school about 7:15 and then head off to to work. But I would typically teach an 8 a.m. class three times a week on a Monday Wednesday Friday and then I would teach class for an hour or two and then I'd run off to the classes I was taking notes for a public speaking class or something like that. I'd do that for an hour and then I would head back to my office or some office hours answer e-mails.

Mike: [00:08:05] I'm also department chair of natural sciences so there's always something going on with that that I was responsible for scheduling and so forth. And then we have two campuses and six. And so I would usually in the afternoons would drive off to the Lawrence campus to do about 15 20 minutes away drive over there or teach a class over there get down about 5 o'clock by 15 and then head home to a couple of hours you know well first I take the kids to karate and then come back home make sure we all sit at the table and get our homework done try to get dinner in there somewhere. And yeah usually I wasn't able to get my homework done or my papers graded things like that.

Mike: [00:08:51] And so actually the kids are in bed about eight and I usually spend you know three four or five hours trying to you know fit all of that in and then get up the next day and started all over. So it's a little different you know each day has a slightly different schedule but that's a pretty good look at it.

Bonni: [00:09:09] What did you use to keep track of all of your school assignments and papers that were doing and things like that?

Mike: [00:09:16] I still have an old hardcopy calendar you know that I kind of day planner I guess. And so I keep everything in there. I merged my you know my teaching stuff or you know schedule with my class schedule the classes I was taking simply because there was no other way to keep everything straight. And so if I knew I had a big research paper coming up for instance I would have to make sure that I you know knew when I had meetings and when I was teaching classes because you know I mean when it came to priorities my family came first and then you know my work and then my schooling which I think is probably how many of my students feel as well and that's how I try to keep it straight.

Mike: [00:10:02] I mean organization was really key to everything I had to make sure that I had the syllabus you know printed out from before the class even began so that I could try to fit everything in because there is no other way to do it.

Bonni: [00:10:15] There was that article written about you on the Chronicle and I don't know if you've had a chance to go look at some of the comments and by the way I would not if you haven't read ridiculous people who clearly didn't even read the article before they start commenting like well of course it's different than when he went to school and they're like he said that in the interview it's right here sorry I'm going off on a rant here but there was a number of calls for you to write a book and I'm wondering if you have had any thoughts about how you might like to amplify. Really you're learning to really benefit those of us who maybe aren't going to do what you did.

Mike: [00:10:57] I hadn't actually thought about it. I mean honestly I kind of just did this as my own professional development. It was just kind of a spur of the moment like Hey I wonder what this would be like. I didn't realize how much work it was getting into it. I probably should've.

Mike: [00:11:13] But yeah I mean everyone that I've talked I tried to keep it on the down low I try not to make a big deal of it for a couple of reasons. One is that you know I didn't think it was anything special because this is what our students do every day. But the I was worried that I would drop out at some point and I didn't want anyone to call me on it and say, "Hey weren't you going to school and doing this." And so yeah now I mean now that you mention it I don't know.

Mike: [00:11:38] I don't consider myself an author but maybe I'll put together you know a couple of articles or a blog or something just to kind a detail you know some of the things that I learned. I mean it's things that I'm incorporating into my own teaching. I'm sure a lot of people would think that you know these should be self-evident and why wouldn't anyone think of these. But the things that I hadn't thought of.

Bonni: [00:12:02] And tell me a little bit about that what are some of the ways that your teaching may be changed right when you are in the middle of it and some of the things you'd like to see change in the future.

Mike: [00:12:10] So I guess kind of the most obvious one was that at the college we have something called first year seminar which is where all of our incoming

freshmen come in and teach time management introduce you to the college you know kind of go through all the different things that we have.

Mike: [00:12:29] And so I also happened to teach a science kind of science based version of that class and I was actually teaching at the exact same semester that I was taking the class. And you know I found before I feel like I was pretty confident with my teaching in there but my professor Professor Spinelli was incredible. I mean she literally had tumors of everything you know like oh instead of just telling you that we have a theater program let's actually go to the theater and talk to the head of the theater program instead of just mentioning that we have services for veterans. Why don't we go to the veterans center and you know have have the head of the veterans center speak to the class.

Mike: [00:13:14] And so pretty much immediately I started to. I asked for permission but I started to feel pretty much every activity that she would do because it was just such a different way of teaching than I was used to. I mean it's so much more like let's get out there and do things or actually go to the gym and you know see the equipment in action and things like that rather than you know me just mentioning it. So that was a big one discussion boards.

Mike: [00:13:41] I've definitely changed the way that I that I do discussion boards and then also probably I mean it's not as I don't know it's not quite as exciting and thrilling but I think it's made a major impact on me is that I'm much more kind of empathetic not that I you know just listen to a sad story and say oh you know I'll give you an A. Obviously I'll never do anything like that.

Mike: [00:14:07] But you know just to be able to sit down with the student and say you know what I know what you've been through I know what you're going through. I know how difficult this is. And these are some things that help me you know and I can actually give them some tips. You know just to try to encourage them to you know to persevere because I mean it's definitely doable. But you know our students go through a lot.

Bonni: [00:14:33] What were your rules at the time around confidentiality for this project how open or not open were you and was it different with students and different with professors who were in the classes you were taking?

Mike: [00:14:46] I tried to kind of keep it on the down low as much as possible but I would never you know like lie about it I wouldn't you know say that I was something that I wasn't. So for instance you know the first day of class I would

walk into class you know sit down with my books and so forth. I kind of covertly look around and see if I recognized any students.

Mike: [00:15:07] I mean we have thousands of students at Northern Essex and so there is no way that I knew everyone especially since many of the classes I was taking were classes that first year students would take and they may not have progressed into my chemistry or from science classes at that point. And so I would you know I wouldn't mention anything if the professor recognized me which I don't know all of the faculty at the college either.

Mike: [00:15:31] And I would you know after class or before class I'd kind of just mentioned what I was doing and that I wasn't there to check up on them. You know I really just wanted to experience it as a student and I'm often the faculty were very enthusiastic and were saying you know I'm a little nervous but I'd love to hear your feedback you know honest feedback on what you think is working and what doesn't.

Mike: [00:15:55] Because they really wanted to improve their teaching and I found that their teaching is probably better than mine and so I improved my teaching far more than I think they could. But then with students if someone asked me you know who I was what I was doing there I would mention it and sometimes I'd ask them not to advertise it too much.

Mike: [00:16:15] But in some cases you know I see I knew so many of the students in the classroom like in my public speaking class that you know the cat was out of the bag. And so I would just kind of embrace that and you know which was kind of nice I mean it was interesting to see some of the students that I was classmates with who got to know me and then found out I was a professor and so purposely took my class the following semester. And you know just because they thought it was such a great idea.

Bonni: [00:16:44] You talked a little bit about changing your discussion board approach could you share more about that.

Mike: [00:16:50] Sure. You know I teach an online class and I you know in all of my classes I'd like to have them do kind of some hot topics in science right some nuclear power genetic engineering vaccines things like that where I you know they hear about things in the media and I like them to kind of look at both sides of the issue at the research. And so in the past I was definitely one sided.

Mike: [00:17:14] You know I'm a total introvert. I didn't like to talk to people I like to do sit and I'll do my own thing which is ironic being a teacher. And so I kind of assumed that's how my students want things to be. And so there are you know quote unquote discussion boards. It was more like here. Post your thoughts on this issue. And that was it. Right. They didn't have to really interact with each other and so forth.

Mike: [00:17:36] But going through you know my literature class my English Composition class and some of the other classes I saw how powerful a discussion board can be a real discussion board where the students actually go out there and they post their thoughts on things and then they actually get a chance to interact with each other.

Mike: [00:17:57] I really like the structure of some of the boards where you know my professors would actually mention like oh you know this is what a good post looks like this is what a bad post looks like this is something in between. This is what I expect and so I try to do that now where I model for each of my students like this is what an A paper looks like you know for each assignment because you know sometimes you just don't know.

Mike: [00:18:20] I mean in one of my classes I had no idea what was really expected of me and then when I would you know turn in the assignment. And so it was kind of it was very kind of frustrating to me being in academia and saying that sometimes our expectations are unclear you know and I'm sure I fall into the same trap or you know I make an assignment and it's totally clear to me because I created it. But my students don't always know what I expect and sometimes they're too afraid to ask.

Bonni: [00:18:54] As soon as you had agreed to do the interview with me and we had actually a pretty last minute approach because you were headed our set should say are headed out of town and actually why don't we talk about that just for a minute and then I'll share the questions I got on Twitter on what, where are you headed very soon. And actually by the time this airs you'll already be there.

Mike: [00:19:14] Yes. I'm actually heading out to Florence, Italy to teach a study abroad course for about four weeks through the Northern Essex. And it's great. I mean we have a fabulous study abroad program where students get a chance to travel all over. And so this is kind of a collaboration between an art history class and my science class which is called Global Discoveries in Science.

Mike: [00:19:39] So we're talking about Galileo and da Vinci and recreating some of their famous experiments building a Galileo telescope and then taking it with us to Florence. And you know actually looking up at the night sky and going and seeing his original telescope in the museum and so forth. So that's a super exciting opportunity.

Bonni: [00:19:59] And have you ever done anything like that before?

Mike: [00:20:02] This is the first time for me. I mean to study abroad programs been going on for a while they go to Ecuador and Belize and England and so forth. But this is the first time that I'm actually going to be able to you know take a take part in this. I'm pretty excited. I mean between the two classes that are going to this it's the largest study abroad program we've had so far at NECC.

Bonni: [00:20:23] So anyway, I'm super excited about that. And I did mention on Twitter that I was going to get a chance to talk to you today. And there were a couple of questions that came in from people on Twitter. First it's Lisa. She wants to know what teaching methods you found most effective.

Mike: [00:20:41] See so most effective teaching methods I would say a lot of in-class collaborative work. I mean I cringe to say that a little bit because as an introvert it was a bit like pulling teeth and even now I mean it wasn't as bad as when I was an 18 year old college student. But even now the professor would say I want you to turn to the person next to you. And you know we're going to talk about this or proofread a paper or get in small groups and do something. I would still cringe just a little inside and just instinctively but honestly you know working with the other students and seeing what they're doing and seeing their writing so forth really help me to improve my own writing.

Mike: [00:21:28] Another thing was my public speaking professor you know obviously in that class he would have us actually you know get up there and give a lot of speeches which makes sense. And I had my students give presentations in my chemistry in forensic science classes and well because I think that those are important skills to have. But as a professor I am always much more hesitant about giving feedback and try to write out notes and give it to the students. But my professor Dave Rattigan he would actually have the students you know have each of us stand up there after the presentation was over and he would you know give us feedback he'd have the other classmates give us feedback.

Mike: [00:22:08] And it was intimidating at first because he did it for every single student and he never will give anything you know he will never be mean about it but he would give the feedback and it would help everyone at the same time. It also helps that he's a stand up comedian so he's a hilarious guy. And so he was great about doing that but something that I think I'm going to incorporate not nearly as funny but you know I think just having everyone benefit from each student's individual feedback is a great idea.

Bonni: [00:22:36] And then [twitter name] wanted to know. Ironically if you worked with or got help from an academic librarian during your time as a student.

Mike: [00:22:47] I actually did on a couple of occasions, the librarians I think have an amazing job and I'm a bit jealous but they get to work with you know a lot of things. So when I was able to work with them a couple of occasions first was in my first year seminar class. You were given a scavenger hunt to go to the library and find some things there and so forth to kind of introduce us to it. And because we have multiple campuses I decided to try to do the entire scavenger hunt at our Lawrence campus and I was totally unaware that we actually had a full scale Library there in the basement of one of the buildings and so I got to meet the librarian there and work closely with her get some help on the scavenger hunt which was great.

Mike: [00:23:35] And then for another part of the first year seminar class we actually toured the role library and that was one of the librarians there and were given some pointers on research tips how to access journals through EBSCO and all the different wonderful resources which honestly I don't know about all of them. And so its nice to see that students have access to so many things and that we have such dedicated enthusiastic librarians that we really support the students in their efforts.

Bonni: [00:24:10] It sounds wonderful. It sounds like the overall experience for you just had such a supportive community but also were regularly reminded of just how hard what so many of our students do is definitely one of the things that I mind to be sure and talk to you about before we move on to the recommendations segment is your love of games and puzzles and specifically how you use that passion of yours in the classroom to communicate chemical principles. Can you tell me a little bit about that.

Mike: [00:24:39] I'm definitely a geek when it comes to board games. I you know have a couple hundred here at home and I try and use them in my class a)

because I think it wakes up the students and they have a lot of fun with it and b) because I really enjoyed it myself. And so I've used you know games like I have escaped the room type game that I use to help us kind of puzzle solving. And you know critical thinking and lateral thinking and so forth.

Mike: [00:25:08] I have used have used a kids game called Rattlesnake that has a board with a bunch of rattlesnakes on it and then some magnets that come out of milk eggs and you know you place it on the board and then each time you place another magnet it starts to affect all of the other magnets as they start to twist and turn and the Magnetic Fields and I use that when I talk about ionic bonds and how you've got positive and negative attractive forces within the you know within the salt crystals for instance and how you know they attract each other. But if they you know become shifted by you know a force or something they can actually repel each other and shatter the crystal and so forth.

Mike: [00:25:53] And then probably the one that my students liked the most is another kid's game called Loopin' Louie which is actually a new version called Loopin' Chewie and she read has Chewbacca flying around.

Mike: [00:26:04] But the idea that you have this plane flying around this little mechanical buzzer you know by plane buzzing around it tries to knock the chickens off of your little towers so you have to hit the student have to hit the paddles to kind of knock a plane out into up into the air to keep it from hitting their chickens. I use that when I talk about the Heisenberg Uncertainty Principle and my general chemistry class and how you can't know and it's you know electrons exact position and no momentum at the same moment as you. The more you know about one variable the less you know about the other.

Mike: [00:26:42] And so I had them play this game. And I tell them what if you had your eyes closed and the only way you would know where that little plane is is when you hit it with your paddle. But as soon as you hit it with your paddle you've now changed its position and so they try to tie that in. And so my students love it and they actually love these games so much that they started their own club at the college called the Bacon Board Game where you can find at Baconboardgamers.com if you are in the area we want to come and hang out with us on Friday nights. But yeah. So we have about a dozen people we get together Friday nights and just play board games sometimes eat bacon and have a lot of fun.

Bonni: [00:27:29] I am so curious if when you bring up the Heisenberg Uncertainty Principle there's always a guaranteed Breaking Bad reference made.

Mike: [00:27:38] There always is. In fact I pulled on my slides. You know we've talked about Heisenberg and I pop up a photo of him breaking bad and then say Oh wrong one. I switched to the actual slide.

Bonni: [00:27:51] That is wonderful. Well this is the point in the show where we each get to give some recommendations. And I have one which I was apologising in advance is a Mac only one. It's called Spillo. And the non-Mac version of this is that I use a bookmarking tool called Pinboard it's at pinboard.in.

Bonni: [00:28:12] And what I love about it is that I can save information that I find around different categories of information and tag that information. A lot of times I'll tag information with that class number that it might relate to. And what I'm looking for new fresh ideas I can just go find the class number tag and then along with certain concepts or principles or topics that I that I address in that particular class and all of that is done on a Mac or on a PC through pinboard.in.

Bonni: [00:28:42] But I found Spillo recently and Spillo is an application on your Mac that will display and manage all of your book marks on pinboard. And one of the things I really had fun doing is I set up my social media posts usually just once a week and I'll spread them out throughout the week of articles that I found or videos I found that I think might be helpful to other professors and with spillover I can just go and set up a smart folder and say Show me the last seven days of bookmarks that I've posted and then I can easily just go and start posting those over to the buffer Web site and get them all set up to be sharing on Twitter in different places throughout the week so I would recommend today Spillo. And if you haven't yet checked out Pinboard definitely get yourself a good bookmarking service pinboard is just one of them Diigo is another really good one too. But I've been using Pinboard for a long time and been happy with it and what.

Mike: [00:29:35] I'll have to check that out.

Bonni: [00:29:36] Yeah. What do you have to recommend today?

Mike: [00:29:39] I am such a big board game fan I'll tell you about one that my students just finished with the club. So it's called Pandemic Legacy and the idea is it's a cooperative game so you're actually all on the same team you're playing against the board itself. And so you're each researcher or a scientist or a medic

you're going out and trying to fight these diseases these viruses that are spreading across the world.

Mike: [00:30:05] But the really crazy innovative thing about it is it's a legacy game which means that each time you play the game you literally mark up the board you wrap up cards you put stickers on the board you write on it and it changes it so that the next time you play that game that every every decision you made in the last game actually affects your current game and it's some of the best gaming moments that my students and I have had ever with such a brilliant system. So I definitely recommend that you check up Pandemic Legacy.

Bonni: [00:30:42] Oh thank you so much. And Mike I know you are probably packing if you haven't started packing yet you should have started packing getting ready for your trip and also of course spending time with your family. I just thank you so much for your time and you've completely just energized me. It's actually quite early for us here in California but I went in to snatch up the opportunity to talk to you before our air conditioning repair people get here and start banging on our earth. Thanks so much for your time and really just you're truly an inspiration to me and I know to so many others and I really do hope that we get to continue learning from you and all of your experience in becoming a student.

Mike: [00:31:22] All right thank you so much Bonni.

Bonni: [00:31:24] After Mike and I got off the phone he said, he thanked me for my time and just for not thinking he was crazy because he said some people thought he was crazy for doing this little experiment and I told him, "Oh I think you're crazy it's just the good kind of crazy."

Bonni: [00:31:38] And truly I just appreciate so much his sacrifice to be able to have such better empathy for his students and then truly inspired by him. And also after he stopped recording I got some great guest ideas from him too so thanks so much to Mike for your contribution to the show and to the broader higher ed community and thanks to all of you for listening if you have any ideas for future shows please send a message to me the fastest way to do that is either through Twitter @Bonni208 or go to teachinginhighered.com/feedback and you can get feedback for future potential guests or topics I would love to hear from you on that.

Bonni: [00:32:21] And if you aren't getting an e-mail from me once a week with the show notes it's just a nice way to be able to not have to remember to go

check the web site to know that it's there and you can subscribe to those weekly updates at teachinginhighered.com/subscribe. Thanks so much for listening.

Bonni: [00:32:37] If you'd like to be more engaged with the community of people who are listening to Teaching in Higher Ed. We've started a Slack channel and you can just send me an email through the feedback link and I'd be happy to add you there some great conversations happening there. And you could be learning from the more intimate community up there if you would like to so. Thanks so much for listening and I look forward to seeing you next time.

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