Bonni: [00:00:00] Today on episode number 192 of the Teaching in Higher Ed podcast, Eric Loepp discusses how he uses data to stimulate student learning

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Bonni: [00:00:21] Welcome to this episode of Teaching in Higher Ed. I'm 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 improve our personal productivity so we can have more peace in our lives and be even more present for our students.

Bonni: [00:00:49] Today's guest Eric Loepp completed his Ph.D. in Political Science at the University of Pittsburgh. Eric is currently an assistant professor of political science at the University of Wisconsin Whitewater where he teaches courses in American government, political behavior, and research methods. His scholarly research focuses on candidate evaluation and electoral decision making particularly in primary elections in the classroom, Eric emphasizes team and database teaching, developing activities and assignments that focus on data generated by students themselves, as you're going to hear in today's interview with Eric. Eric, welcome to Teaching in Higher Ed.

Eric: [00:01:34] Hi Bonni, thanks for having me.

Bonni: [00:01:35] I told you that I was reading your article that today's conversation is based on and had about 500 questions that I wanted to ask you, so I'm going to try to narrow it down a tiny bit. And one thing I first want to begin with is just how did you start thinking about using data in your teaching.? Just in general, what piqued your curiosity and interest in that?

Eric: [00:01:59] There were a few things that did that for me. Number one is I always thought there was kind of a disconnect for academics when we go to graduate school, we are trained to be researchers and to use data and all that

and then we also get some training on teaching. And we often think of those as two different parts of our job. And so early on I was thinking why can't we take advantage of our technical skill and our ability to do research and leverage that into the teaching side of things? And not treat them so much as separate entities?

Eric: [00:02:30] So that had always been a curiosity for me and it was really reinforced when I started teaching here a few years ago because I noticed a lot of students, as we all deal with, maybe don't always want to engage with the book. I have a lot of non majors taking a lot of my courses. And I started thinking What are ways that we can engage the current college student and how can we make class more lively and interesting.

Eric: [00:02:55] And one idea I had was well, we're dealing with a selfie generation, right. A lot of people are interested in what's going on in the world and it's a very kind of personal type of society that we live in now. What if we leveraged our technical skills and collected information from students that we could use in the course of illustrating our course concepts or engaging in class activities. Why not rely on the students in front of us for that information rather than say a survey or a graph or a table or some other figure in a textbook that the students aren't really a part of?

Bonni: [00:03:30] You title your article Beyond Polls: Using Science and Student Data to Stimulate Learning. And one of the things I took away from reading it is that it's not like you don't think that polls are good or some of the ways and approaches that different disciplines are using. Like you give the example of peer instruction, which people who've been listening for a while or reading in this space might recognize as I get asked my opinion or I get asked to answer a question that does have a correct answer. I give my answer, then I talk to the person sitting next to me. Then I see if my answer has changed at all.

Bonni: [00:04:05] I mean those are all good practices, but you really wanted to go a little bit deeper into what's possible in using some of these technologies. Could you talk about your early experiments with doing this? How did you first start into going a little bit beyond what traditional polls are thought of?

Eric: [00:04:24] Right. The first thing that I did was make my own life very complicated by doing everything with paper and pencil. I would have an idea, "Hey could I explore this phenomenon by doing a little experiment with my students?" And randomly assigned some of them to read this or to see that and

then compare their answers on the big screen. And I did that and it worked pretty well.

Eric: [00:04:45] But it was incredibly time intensive and I couldn't give them results on the spot. And so there would also often be a lag. And maybe what I talked about last week is not as applicable to what is going on this week, but now I have data from last week available this week and it got kind of complicated.

Eric: [00:05:00] So I really got into the idea of can I collect data in a little bit more of a formal fashion. Can I do it early on? And is it possible to get information from students that maybe you can't get using a a polling system. I think they're great. They can be wonderful for a lot of things, low stakes assessments and asking students how things are coming across and things like that. But what if we wanted to show some sort of experimental results? Or what if there was something qualitative? I know the Polling technology is getting better and can increasingly facilitate things like free responses. But a lot of what we have available is somewhat limited in the types of inquiries that we can pose to students.

Eric: [00:05:41] And I wanted to go a little bit beyond that and create different activities and even assignments coming out of data that they provide. And so I found that putting it all together in a large survey, with perhaps some follow up surveys throughout the term, gives me much more dynamic data than I could get using a polling system.

Bonni: [00:05:59] You contrast of course using external data in a political science class with using internal data, where we use students as the data. And I wanted to just stop for a moment because I think that like me, many people who listen to the show are- I shouldn't say I think, I know that most people who listen to this show are into politics and are aware of just how important it is for us to be civic minded.

Bonni: [00:06:23] You talk about external data being used in political science classes and you give this example of just some of the amazing data visualization that is happening today. And I'm curious if you have one or two sites where you just think that's my go to for data visualization when it comes to politics? Any interesting sources that we might be able to link to in the show notes?

Eric: [00:06:47] Sure, absolutely. FiveThirtyEight is the website started by Nate Silver, it has gained a lot of popular attraction. It's kind of an interesting fusion of both the technical side of politics and information while also being somewhat

accessible to most people who have a basic understanding of data. So I've liked FiveThirtyEight in the past. Occasionally newspapers, The New York Times or The Washington Post will have an article or a web page.

Eric: [00:07:14] One of my favorites that a newspaper did was they let you go onto their web page and they had a empty graph showing the eight years that Barack Obama was president. And you could drag your mouse across and indicate what did you think happened in the economy during those eight years while Barack Obama was president. Did it go up? Did it go down? Were there peaks? Were there valleys? And you draw your lines in. After that you can press a button and the actual data will be overlaid on top of yours. And the kind of the fun element is you could see as the newspaper put it, are you as smart as you think you are? Is what you thought happened actually what happened? And I find those can be really, really valuable and some of them are programs that students can use, some are just kind of more for fun. But I think anything we can do to try to help students engage with data is very, very helpful.

Eric: [00:08:08] One kind of side benefit of this whole program is helping students develop basic data literacy skills which increasingly we're seeing in higher ed is becoming a priority. How do we prepare a generation to work with data? Be able to communicate effectively? Understand it effectively? And that's not even the main goal of what I'm doing here. But I found it's been kind of a residual effect very much to my pleasure.

Bonni: [00:08:30] I really get intrigued by this part of learning. I was first introduced to some of the formal research around it by James Lang's book called Small Teaching. But just the importance of using prediction in our teaching and how that can be a powerful way to both engage students and help to deepen their learning. So it sounds like with some of these interactive tools you're talking about I can use that right there when we're talking about that technology.

Bonni: [00:08:56] Yeah. I've enjoyed the ways in which some of these creative data visualizers just present information and I think that's a great example of one where we can even predict. And did you find that your students or yourself were as smart as you thought you were?

Eric: [00:09:11] I'm trying to remember exactly how I did. I remember I was always off a little bit maybe I had the general patterns right. But it's very interesting because a lot of people are generally knowledgeable about what's

going on in the moment. But you go back a few months or a few quarters, I don't know what the unemployment rate was a year ago.

Eric: [00:09:29] Yet we know that in politics a lot of people's perceptions of political figures and how is the country going? Right direction? Wrong direction? That kind of thing. A lot of people in political science would argue that's kind of a running tally. It's an opinion that we update from time to time even if we're not really consciously following exactly why we're updating it.

Eric: [00:09:49] So I cannot admit to getting a perfect score on that. But actually one of the great things that those sorts of exercises can do is help us see how fleeting our political knowledge is and how quickly we forget certain things. So I think even if we don't get everything right, it can be a very valuable learning experience.

Bonni: [00:10:06] When you contacted me to share this article that you had written and suggested that if I ever wanted to have you come on the show, you were willing to. Of course I had to go and do my research. And one of the things that I was very impressed by was watching you- I don't remember the topic, but I did find a video of you on YouTube just talking to a public audience, people who had come into your institution but it was general community members and how patient you were with the questions that were really statements disguised as questions. That is that is a very patient person there.

Bonni: [00:10:40] What is your philosophy about when you're talking with your students or when you're talking with members of the community about how much you think that your own beliefs and opinions about politics should be expressed and how much you think you should attempt, although it's an impossible quest, but you shouldn't attempt to just be stating as much fact as is possible? Again, it is not possible. But where do you want- What does your aspiration for how much students and members of the community might know about your opinions?

Eric: [00:11:10] As a general rule, I try not to go too far into the personal opinions, especially on issues that really are kind of personal judgments. So if there is something like, "is abortion a good idea?" or something. My opinion is not really any more valid than anyone else's. Now there may be certain areas like "how much should we read into a public opinion poll or what can we draw from this or that election system? What are the advantages or disadvantages of say the Electoral College?" Those sorts of things I'm happy to share some of the technical information and what people of various political persuasions would

say. But I tend to be very, very protective of the notion that my principal objective is to help people engage with politics. And if you come to an event that I'm a part of and you learn something. My goal is not to reform you to have you come in and necessarily change your mind, but I think it's really important especially with a lot of the content that we cover in my sorts of courses that everyone is well informed. And there are certain things that you kind of have to know and that's kind of where I focus my attention. But as a general rule, if I can help share information and help you form a more well-rounded opinion, I'm not going to focus too much on making sure your opinion comes out any one way.

Bonni: [00:12:38] When it comes to those really controversial issues like you brought up abortion. Do you believe it is important to help students or members of the community uncover what might be some conflicts in what they say are their principles? The most classic one with regards to abortion would be someone who says they believe in the value of life and then you say "how do you feel about the death penalty?" And then it gets really quiet or there's a nervous laugh like wow wait a minute. Do you find that to be important to have them dig a little deeper? I picked an easy low hanging fruit when there, but do you try to do that in helping us be more consistent in our thinking about our principles?

Eric: [00:13:20] I do, I think that's really important. And again, one of the things that we know about the way politics works today is that we are increasingly parts of echo chambers where the people, and the websites, and the social media with which we interact tend to reinforce the political views we already have rather than educate us to a new perspective.

Eric: [00:13:40] So I will tell students that we may deal with our particular topic. I'm not here to change your mind, but I'm also going to let you know what we know to be true? What is the social science evidence? So one example might be something like in a recent class on ethnic politics, we talked about the wage gap, the difference between pay rates for men and women. And one of the things we talked about was you cannot really deny that there is a gap out there but it's also reasonable for people to say well what about the various other factors that we need to integrate? What are the real causes of a wage gap? Is it purely discrimination? Is it a matter of choice? And so with the students I again don't typically try to say you need to leave here believing this or that but I do tell them that I'm going to share with you what we know to be true, what the evidence suggests about various phenomenon and you're going to need to know that and if you don't want to embrace it, then you're going to need to defend why not.

Eric: [00:14:41] But I do worry sometimes that if we kind of push too hard that you can also turn off some people to receiving any sort of new information and finding that balance is right. Because I also don't want to support false information at all.

Eric: [00:14:57] I tell my students and the various audiences that I speak with that I'm coming at this from a place of here's what we know legally, here's what we know scientifically and I'm going to share with you everything I can to help round out your knowledge. And then from there we can talk about opinions.

Bonni: [00:15:11] I know one of the ways you're trying to attempt that is through an approach called autoethnography. Many of our listeners will already know that term, but some are in a discipline where they might not be familiar with it. Could you share a little bit about what autoethnography is and how you're using it and some of this teaching?

Eric: [00:15:28] It was a new term to me as well so I will cop to that. Autoethnography is the idea that you can conduct research and analysis as a researcher using yourself as kind of the object being investigated, if you will. Auto of course referring to oneself. And the inspiration for me with that was again kind of going back a little bit to the selfie generation type of attitude where- which is not to say by the way that all students are you know completely self-absorbed or anything like that, simply that we're in a society where things are very very personal. We have our own Twitter accounts and Facebook and things.

Eric: [00:16:08] And I found just before I was doing anything was data driven teaching that any time I took a poll of a classroom, the students were much more interested in the results than if I showed them the results of say the American National Election Survey, which is kind of the gold standard in my discipline for getting a nice representative sample of the country. And I remember thinking boy you all should maybe be a little bit more impressed with these data I'm showing you they were hard to get. That's a big survey. But when it was external to them, some students were like "OK I buy that" but there was kind of a new layer, a new dynamic, a kind of new leaning forward in their seats if I said OK let's do a poll in the room and I'd like to show you what happened when your class was part of this experiment or was asked to reflect on this or that issue.

Eric: [00:16:56] And so I started getting more into this auto ethnography and reading up on what do we know about how we can use students as subjects and allow them to kind of study themselves and their peers rather than relying on information from other data sources or things that do not involve them.

Eric: [00:17:15] And I found there's been a great deal of perception especially among the non majors, among people who are perhaps not naturally drawn to the material. They really respond. And you know you can almost sometimes have a little bit of a of a big reveal and wait an extra beat before revealing the slide with the answers. And never are so many eyeballs interested in what's on a screen then if you're about to reveal the results of an experiment you did or something like that with the group.

Eric: [00:17:43] So they really enjoy looking at themselves and their peers and I'm trying to leverage that as much as I can into making our classroom interesting. But also a place of engagement and active learning.

Bonni: [00:17:53] I know that you do this all of the time, but I wonder if you would just pick an example of a time when you did this where you really sensed the students curiosity had been piqued. And could you walk us through more systematically ofhat do you show on the screen? What what tool are you using? How are the students then responding? And then when do you show the answers? Kind of walk us through what it would be like if we were sitting in that class as we're all having our own curiosity.

Eric: [00:18:21] One of my favorite experiments I do as part of our discussion about civil liberties. And I should probably mention most of this is being done in an introduction to American government course. So a survey course that touches on various aspects of American political life. And when we talk about civil liberties, one of the issues we discuss is freedom of religion, and the establishment clause, and what is the relationship between practicing religion and what can the government restrict with religion and things like that.

Eric: [00:18:50] And one thing I do with the students is an experiment which they don't know they're participating in. But every student who is taking the survey will read a short story and the story is saying there is a group in the town next to yours and they believe an animal sacrifice as part of their religious expression and so one thing they do is sacrifice animals like kittens and other small mammals in the course of practicing their religion.

Eric: [00:19:18] Do you think they should be allowed to practice their religion? Is this a reasonable thing to do? Is that a protected form of expression? And so students will read that and they will say they should be allowed to do it. They should not be allowed to do it. But what the students don't know is that some of them were told that the group will sacrifice kittens and small mammals. Another group of students, all randomly assigned, will be asked about sacrifices involving chickens and other poultry. A third group, randomly assigned, is not told about any type of animal, they are just told there's animal sacrifice.

Eric: [00:19:51] And when we get to class, I show them the results of this experiment and we look at how support for animal sacrifice differs as a function of what type of animal is being sacrificed. As you might imagine, support for animal sacrifice if it involves kittens and mammals is much lower than animal sacrifice if it involves chickens. And so we go step by step, I show them first that control group with no animal reference and then I show them the result.

Bonni: [00:20:21] Wait wait. I want to I want to get really clearly. They have read this short story, you've passed it out in class. They've read it. They don't know that there are differences? Or did they read it outside of class?

Eric: [00:20:35] They read it outside of class. Their first course assignment in September or in January is to complete this long survey which is filled with all sorts of experiments and other goodies. So by the time we get to class, it's usually several weeks after they have read it and they do it online. So I have an electronic data set with all of their responses.

Bonni: [00:20:53] Oh okay. And what did you use to gather that initial data dump?

Eric: [00:20:58] There are a number of survey firms out there that can do this sort of thing. We use Qualtrics at my university and I've found that to be pretty effective for my purposes.

Bonni: [00:21:06] So they read this short story that was done in conjunction with other data that they were providing that will come up at different times of the class. And now they're sitting in the classroom and how much longer after? A few weeks after they failed that first thing out?

Eric: [00:21:22] Yes.

Bonni: [00:21:22] And then now they're sitting there. Tell me how you bring it up? Like how do you? At what point in time does the mystery get revealed?

Eric: [00:21:31] So if we're talking about civil liberties and say the first amendment, I might share some technical information, The Free Exercise Clause, the Free Establishment Clause, that sort of thing. And then I will usually say something to the effect of "do you all remember reading about animal sacrifice and asking you know giving your opinion on it?" And usually you know two thirds of the classes say "Oh yeah, I remember that" and then all explain to them "Well you were actually part of an experiment and different groups were asked about different types of animals so let's see what you all had to say about animal sacrifice."

Eric: [00:22:04] And then we work through each of those experimental conditions and we start with no reference to animals and then we show the support for chicken sacrifice. Usually I've done this two or three times now, and actually support for animal sacrifice tends to go up when you reference chickens relative to referencing no animal at all. So you know I might make a joke about what do you have against chickens? Or whatever.

Eric: [00:22:28] And then our third group was people asked about animal sacrifice involving kittens. And that is the one that will usually they'll be really excited to see. And again that might be a big reveal or a little bit of a tease. I'll usually show them what the answer was or excuse me the question they answered before I actually show the data, just to jog their memory. This is what some of you saw. This is what some of you saw.

Eric: [00:22:53] And then we get to that big reveal and they see support for animal sacrifice involving kittens. And of course it's usually much lower, the support, but there's always one or two people that still strongly support it. And again someone might say all right which one of you hates cats? Or whatever happens to be something funny an outlier in their are particular data set. So they kind of have a good time and there's usually some laughs. But what is great is to kind of leverage that. And while we have their attention, then show them, maybe compare one graph with the chicken results and one graph with the kitten results and then we have a more serious conversation.

Bonni: [00:23:32] I'm wondering on your chart, do you actually have like stacked up kittens in the chart?

Eric: [00:23:39] That is a great idea, Bonni. Maybe I should institute that next time I don't want to. I don't want to do anything too activating. That's kind of a stressful image. My dad is actually is a vetenarian. But I just have a bar graph but that is one way to do it, I suppose.

Bonni: [00:23:53] That's a stacked bar graph.

Eric: [00:23:54] I'm not sure if there are many stock photos or images available so we might have to get creative.

Bonni: [00:23:58] Yeah. So I did want to just mention something because I'm feeling a little bit protective of some of our listeners who are newer to higher ed. But what has been described so far might have made a few of our more experienced faculty prickle a little bit when talking about experiments on our students. In most IRB's, that would be the institutional review board that is governing and making sure that human subjects are treated fairly in our various experiments.

Bonni: [00:24:31] It would mostly be in everyone that I'm aware of, okay to do these sorts of experiments in your classroom as long as you didn't publish the specific results. So Eric has written an article about his pedagogical techniques but he didn't publish the results of the kittens and the animal sacrifices. Though I did just want to make that distinction so that people understood that when we start talking about the scholarship of teaching and learning, if Eric did want to publish these specific results around having read the short story then he would need to have received approval from his IRB and then he could share all the stacked kitten charts that he wanted to in whatever journal he wanted to. So you didn't mention that that distinction, but I just for some of our less experienced faculty I wanted to make sure and share that little point with them.

Eric: [00:25:20] No, you're absolutely right. And actually the article does have data published from one semester. Not the kitten example, but some other experiments that I did and that one was mostly focused on one week of class just to kind of dive in. And that one did have IRB approved research both for publishing the data from class and then also I did a separate assessment survey with students asking them how well the data helped as a learning tool and all that stuff.

Eric: [00:25:47] So yeah, it is something to be careful of. And as a general rule, if you're in the classroom and not seeking to publish or publicly air the results, you don't typically need that. But I did go and make sure that all of the stuff that is

published has that coverage just because it never hurts to be careful and make sure you have all that stuff passed through somebody before it's in print.

Bonni: [00:26:08] Tell us a little bit about the way you queried your students about the word bureaucracy.

Eric: [00:26:13] That one was fun. Bureaucracy is, with all due respect to my friends who study it, it just sounds like a boring word. And it's often a boring chapter for a lot of students. One thing I do as part of that survey is I ask students what parts of the textbook, what are the themes that we might talk about that you're most interested in? And bureaucracy is always one of the lowest, it's just not something people find very exciting.

Eric: [00:26:37] And so I was thinking how in the world can I integrate some data in a way that makes bureaucracy somewhat interesting to talk about? And I had the idea of well what about a word association. A lot of people have heard the term bureaucracy, but a lot of people could not define it. And I think of some of my favorite shows, you know a show maybe like Parks and Rec which kind of makes fun of bureaucracy at times.

Eric: [00:27:00] And I thought so I bet a lot of students would think of something if they heard the word, but they may not be able to find it. So to start the week talking about bureaucracy and the executive branch of politics, we began with a word cloud. I had every single student write down the first or I should say they typed the first word that came to mind when they heard the term bureaucracy. They were instructed not to try to define it, not to think too hard but simply to give me that snapshot reaction.

Eric: [00:27:27] And we opened a class that day with a word cloud with what were the common responses and themes and associations that students had. And it was really, really interesting because it gave I think a pretty accurate picture of what people think bureaucracy is and words like red tape and corruption. Some of the things that we tend to think about were very prominent. Other things, rules, regulations also showed up a bit. But it was a great starting point for us because I showed the students the word cloud and then in groups they get together and try to characterize the word cloud. Was it was highly complimentary? Was it really negative? What was kind of the overall groups sense of bureaucracy? And inevitably and invariably, it is usually a pretty negative connotation. And then we start talking about what the bureaucracy really is and what are some of the ways in which it works and what are some

things that maybe don't work so well. And throughout the course of the week, we kind of reflect back to that first word cloud.

Eric: [00:28:29] And students will weigh in with is word cloud very fair? Why do we have these assumptions? Is it waiting in line at the DMV, does that shape your entire perspective? Because if so, a lot of us would probably have the best view. But it was a great way to kind of start that conversation again about a subject that most people are not naturally drawn to.

Eric: [00:28:51] But we ended I'm having some some pretty serious and heavy conversations about how fair is it? How reasonable are these assumptions that we're making? And to what extent, if any, should we revise them? And maybe some students did, maybe some students didn't. But as we discussed earlier, my main goal is that they know what they're talking about and they can draw their opinions with as complete information as we can cover in that course.

Bonni: [00:29:14] Before we get to the recommendation segment, I did want to ask about the feedback that you got from your students about your use of this data driven method.

Eric: [00:29:22] Yeah. I did a survey at the end of the semester for which I was collecting data for this article and I wanted to get a sense from students, how effective was it both in a kind of a it captured my interest but also in terms of did it really helped me learn, did I internalize information better? And pretty overwhelmingly the response was positive.

Eric: [00:29:45] I asked students to rank order all the various elements of the course, the textbook, the lecture, the videos, all the different things we did to help them learn, and data was right up there with the lecture as the number one and number two items students reported in terms of being helpful to their learning. And what's interesting is things like the textbook and review session, some more traditional teaching strategies, actually didn't rank so well. So they really responded positively to it.

Eric: [00:30:13] And in the course of asking them about things like is class more interesting? Did this help with discussion? Overwhelmingly students reported that it did. One of my favorite outcomes from this was a number of students reported that the the data really helps them engage with subject matter that maybe they would not want to engage in if I was simply taking an opinion poll by asking people to raise their hands. A lot of students said I felt so much better saying something in a survey and seeing aggregate results than I would in talking even

in a small group a lot of students are reluctant to do so. But I had a number of people say things like "I was really happy to see I'm not the only one who thinks this" or "wow I didn't realize so many people held that view."

Eric: [00:30:55] And so I was I was really happy to see that. Two other things that really stood out to me. Number one is there was no significant difference, statistically, between majors and non majors in terms of their reports and their evaluations which says to me that this wasn't just something that really fired up the students that are already interested in politics. It really spoke to students that were not as well. And maybe this is a way to get some people to try additional political science courses. I asked students "do you want to see more data in classrooms?" And overwhelmingly to the tune of 90 percent or so students said "yes, I would like to see more data in classrooms." I even asked them "Would you be more likely to take a course if you knew there would be data involved?" If you were more involved in a part of it.

Eric: [00:31:41] And a pretty solid majority somewhere 60, 65 percent actually said "I'd be more likely to take the same course if it had a data component versus if it did not." So I think there's a lot more to do on this and especially in terms of kind of the causality and are our students actually performing better as a result? These are mostly self reports at the moment, but overall the the student feedback has been very positive and I'm encouraged to see that a lot of them are looking for more of this sort of thing. So I'm hoping to contribute to that however I can.

Bonni: [00:32:12] What is the average size class that you might be using some of these techniques in?

Eric: [00:32:17] Typically the class is 40 students, give or take. I will usually combine into one survey various sections will take it. So I could actually compare the Monday/ Wednesday class to the Tuesday/ Thursday class. Or now increasingly, I might compare what is this semester think about an issue versus last semester? Maybe something happened over the summer.

Eric: [00:32:38] And we can compare pre and post. So I'm lucky to be at a university where I can typically get around 80 to 100 students every semester partaking. So I can get a nice new group and I can try new experiments and things like that to to continue to build on this foundation we've already started.

Bonni: [00:32:56] When you build the kittens chart, are you building it for a section specifically? Or are you are you combining that that semesters or terms data all in one kitten chart?

Eric: [00:33:08] It usually depends on the question and kind of how relevant I think it would be to compare. If there's a major difference between one section and another for instance, that might be worth talking about. If they're the same, I might just put them together. My goal this last summer was to create a program where I could essentially feed the data into the statistical software and then I have this file where I can basically press go and it will generate a graph.

Eric: [00:33:33] So what I have done is set it up such that I can just with a few keystrokes limit the data and I can say give me only fall of 2017. Or give me everybody since spring of 2017. Or give me only people that identify as male. Or only political science majors. Those sorts of thing. So it depends on the question, but I'm very happy to be at a place now where I can do those sorts of comparisons with relative ease.

Bonni: [00:33:58] I'm picturing a big complex pivot table in excel but I don't know the chart part.

Eric: [00:34:04] Right. Yeah. I try not to do too much of that in excel, but sometimes Excel can be good for things like pie charts. And one thing the students do is give the president a grade and then I throw in Excel pie chart up with all the different numbers of students who gave the president different grades and they love seeing political stuff like that.

Bonni: [00:34:21] Yeah. Well this is the point in the show where we each get to give some recommendations and since I know that this episode is going to air the day after Valentine's Day, maybe people still have romance in the air. I'm not a big Valentine's Day person, so I'm not sure how I'll be feeling. But one very unique romantic comedy that I saw actually some months ago and still I'm thinking about it today is a huge recommendation.

Bonni: [00:34:47] And that is called The Big Sick. This is a true story, it is about the Pakistan born comedian Kumayl Nanjiani and his now wife and at the time grad student Emily Gardner. And I'm reading from the Internet Movie Database this description now. "They fall in love but struggle as their cultures clash. When Emily contracts a mysterious illness." That's why the movie is called The Big Sick, by the way. "Kumayl finds himself forced to face her feisty parents, his family's expectations and his true feelings.".

Bonni: [00:35:24] And it is absolutely a delightful movie. It's funny and also just makes you think at the same time. There are wonderful ways in which some of the cultural differences are expressed. Ray Romano and Holly Hunter play the parents of Emily Gardner and they are just delightful, just delightful. And I just, I can't recommend this movie enough and actually I think it just came out on Netflix. I'll check and if it did I'll put a link to that in the show notes because I know I had bought it on iTunes but I think since I had bought it, it's actually been released somewhere you could see it for free. Highly recommend the Big Sick and now I'm gonna pass it over to Eric for his recommendation.

Eric: [00:36:07] So my recommendation is maybe not as fun as that one, but I think a really interesting thing. It's more of a current event in politics that I really encourage people to follow and that is what is the future of free speech in our digital world? We've seen a lot lately with college campuses and issues of free speech and protest and all that kind of thing.

Eric: [00:36:29] And one thing that is really neat to follow right now is how old Facebook and Twitter and various online platforms regulate speech and to what extent should they do so? This is something that's been picking up quite a bit of traction lately. Who knows, this may be a major Supreme Court case at some point. But kind of a question of should the American constitution and free speech laws as we have them now, should they also apply online? And how do we govern communication in the future? And I think regardless of what you teach, students are going to find this sort of thing really fascinating. So I really encourage everybody to keep an eye out for new happenings in the world of free speech online because the laws have not been written. The framers had no idea this would be coming. And it's one of those things that is still developing. And I think all of us and higher ed, especially anybody involved in politics ought to be following the trajectory of this very important issue.

Bonni: [00:37:27] And just to support your overall pedagogy, you have not told us what you think. So we're going to have to just have our curiosity work. Where can we go to find all your opinions? Where's the secret backdoor? It is on the dark web. Yes.

Eric: [00:37:46] I'll launch the website as soon as the tenure paperwork comes through.

Bonni: [00:37:48] Oh I can't wait. Can't wait. That sounds perfect. Well Eric, I am absolutely delighted to have had this conversation with you. I will of course on

the show notes be posting to the article that you wrote which is just absolutely a delightful read and an important one. And you've given me and all the people who listen to Teaching in Higher Ed such a great inspiration for how we might use data in our classrooms in a really unique way. So thanks so much for coming on the show.

Eric: [00:38:14] Well thank you so much for having me on Bonni and if I can ever help anybody out, it would be my pleasure.

Bonni: [00:38:19] Thank you Eric Loepp for coming on to the Teaching and Higher Ed podcast. And thanks to all of you for listening. If you would like to get the links to what Eric and I talked about and each of us the show notes that come out on a weekly basis as well as an article about teaching or productivity written by me. You can subscribe to the weekly update.

Bonni: [00:38:40] And that subscription is at teachinginhighered.com/subscribe. And if you have yet to review the show on iTunes or whatever service it is that you use to listen, I would encourage you to do so because that's one of the ways to help spread the word about the show. But of course you can also just send an email off to your colleagues tell them episodes that you like to listen to and introduce them to Teaching in Higher Ed. Thanks so much for listening. And I'll see you next time.