

Transcript

[0:01] (music)

Derek Bruff: [0:06] This is Leading Lines. I'm Derek Bruff. On this podcast, we explore the future of educational technology in college and university settings. One way to explore that future is to see how technology is changing how people learn and create in other settings. And then seeing what elements of those changes might translate to education. Christopher Cayari is an assistant professor of music education at Purdue University. He teaches college students, mostly pre-service teachers, but his research considers how musicians use technology, particularly the internet and social media, to make music. Just as YouTube is changing how music is created and shared, Cayari is using YouTube and other video tools to change how his students learn about music. He uses technology to turn his classroom into a learning community where students learn from and with each other. And I think you'll find inspiration from his teaching practices regardless of the discipline you teach. And dear listener, if that doesn't interest you in this interview, then I have three words for you: virtual ukulele ensemble. Here's my conversation with Christopher Cayari. (music)

Derek: [1:18] Christopher, tell me a little bit about kind of where you are now and what you teach and who you teach.

Christopher Cayari: [1:25] So my teaching requirements at Purdue University, sorry, Purdue University in West Lafayette, Indiana is I teach elementary education majors how to incorporate music into the classroom. And my research has to do with how musicians use technology to do what they do online. And how they might use media platforms like YouTube, Discord, Twitch, how they might use all those things to a massive following and connect with each other.

[2:03] So I have two courses a semester that I teach, all elementary education majors, who are not musicians. So this is something completely new. And because of my own interests in

technology, I then throw that on top of everything to make them often go way out of their comfort zone. So that's kind of what I do at Purdue. And in the past I have taught how to incorporate music technology into music classrooms, so music education technology. But now I'm focusing mostly on just elementary educators.

Derek: [2:42] And you said that they generally don't have backgrounds as musicians, right?

Christopher: [2:46] That's correct.

Derek: [2:48] They're, elementary educators are generalists, right?

Christopher: [2:51] Correct. They're the people you would expect to see in a kindergarten through sixth grade classroom in public school systems or private schools, but our program is focused towards making sure that these students can get public school jobs.

Derek: [3:05] Nice. So I'm going to ask more about your courses here in a second. But when did you figure out that you were a teacher? Was there a moment that you can describe where you first saw yourself as a teacher or decided that this was something that you wanted to be part of, part of your professional work?

Christopher: [3:22] I think it stems from being a high school student and going to camps and being a camp counselor. I loved working with kids and seeing those aha moments ranging from how to kick a kickball to how to put together a sewing, sewing a badge onto a sash, or just learning how to ask for the salt instead of grunting and pointing. (Derek laughs) And so it started there, I think, where I just fell in love with helping kids learn new things. And so, in college, I didn't initially go for education. I was going for religious work. And then as I couldn't put down my musical roots, I shifted to music education, like most undergraduates do as they shift their focus, of you know what, "I thought I wanted to do this, but I'd rather do this."

[4:26] And so then I was given opportunities to intern in public schools near Chicago and just fell in love with conducting, and fell in love with sitting around a circle with a bunch of fifth graders singing songs. And so it was just a really fulfilling thing that changed when I went back for my master's degree, I found, I found out that I just loved working with undergraduate students and found that we could pull apart all the little things that we experience in our own education to figure how to do it better and to take the things that we

loved and kind of perpetuate that, but also challenge our preconceived notions of well it has to be this way. Well, how can we do better? Asking those types of things.

Derek: [5:21] Wow, well, and I resonate with that because in my work, I work with faculty, right, to try to help them teach better. And so often we are having to kind of explore their own educational experiences and to sometimes get past the idea that, you know, if it worked for me, it's going to work for all of my students and to help them get into the heads of their students in different ways.

Christopher: [5:43] And even more so nowadays with so much technology media, like there's ubiquitous online connectivity for college students, at least. How can we use that to capitalize on it, to enhance our learning, to go ahead and give ourselves permission to run down a rabbit hole, as a learner. Because if you really, really love how to play, you love pop songs. And you've now had this ukulele, like in my class. They're given a ukulele at the beginning of the semester and they're like, "I really want to learn this song! Will you teach it to us?" And I'm like, "No, go figure it out yourself." And they do, and they bring it back and I'm like, "Great, you just have your final project already done." So yeah, it's fun to help students learn how to learn, if that makes sense.

Derek: [6:35] Yeah. Well, so you're a musician, right? What's your, how do you do music?

Christopher: [6:47] (laughs) Thanks for not asking, "what instrument do you play?" Because I'm like, uh, I play a lot of them. I'm mostly a vocalist. My preferred genre of music is musical theatre. And I've been lucky enough at Purdue to get grants to be able to tour shows that I've written that are half research, half performance, so performance-based research. And so that's how I keep my musical chops, as the saying goes, my musical chops sharp. I also, one of my favorite things to do is play ukulele with my students. And that's how I designed the course that I teach. That we use music that they, they would know, that they hear on the radio, to teach all these musical skills. And so that's how I music mostly through those two things.

[7:45] I teach lessons and so I keep my piano, my guitar, my bass skills up to at least at an eighth grade level (laughs) or if I have a tenth grader, a tenth grade level. But I apply those teaching skills I know to those instruments. So those are the most, mostly the ways I music, through musical theatre. And then what, what some music makers call participatory music making or getting together with people at various different levels and making music

together. Often in our circles, it's pop music, because that's what students are listening to.

Derek: [8:30] Sure. Well, let's talk more about that because one of the first things I heard about you was you did something called a virtual ukulele ensemble. Can you tell me what that is and why, why it happened?

Christopher: [8:40] So my research has been on how musicians are using YouTube to create music in special ways. And one of the biggest like phenomenons or phenomena in classical music and music education was when Eric Whitacre, a neoclassical composer and conductor, saw a fan video from a soprano who said, she's really shy and she created a YouTube video and said, "Hi, Mr. Whitacre," and she said her name and "I wanted to sing for you one of your songs." And that whole idea, if you think about, it's just crazy because there are so many Madonna fans out there. And you can imagine how many times she's signing autographs and then someone's like. "I gotta sing a song for you." Okay?

[9:40] But as a conductor and as an educator, Whitacre was really, really taken by this idea. And you can watch a TED Talk on him. And we could make that link available for your listeners of this. But he just was so struck by the sweetness of this and the way that he was invited into, Britlin, is the person who sent the video, who's invited into Britlin's life for a moment and began thinking, "well, what happens if I got a bunch of people together to do this?"

[10:20] So he put together the first major virtual choir that has now, he's got about at least five major virtual choirs and then some off-shoots like a virtual and live hybrid choir, a youth virtual choir that it started with about 100 singers. And the fourth iteration, which was about four years later, had over like six-thousand, I think. And so people would, Whitacre would allow his music to be, the music parts, the notation was put on his website and people could download that. And then he also played piano to keep everyone together. And he just conducted it in silence. (both laugh) So you watch this video. He'd layer the piano track over it and then you'd sing your part with headphones on and then send him a submission. And this inspired so many different people across the internet, that they started doing it themselves.

Derek: [11:35] And he would take all of these individual submissions and put them all together?

Christopher: [11:40] Well, he'd pay someone to do it, yes. (laughs) And I think it's important to say, Scott Heinz actually had this idea simultaneously and he happened to use Whitacre's, one of Whitacre's pieces, to create his own virtual choir. And I've not been able to talk to Scott or Eric about who really thought of it first, but it was happening simultaneously. So they probably both thought of it first and were working separately. And so one of the ways that I use technology in my classroom to enforce this project is that students are allowed to either perform it live in our show and tell or submit a video for show and tell. And so the last day of class we have a show and tell. Everyone gets two minutes and they share.

[12:32] And it's been very interesting that for a set of two years, I had no one perform live in that class. And the reason being, I believe, is because the students are scared to perform. They're worried they're gonna mess up. And they don't want to see the faces of their peers who look at them and judge them when they do bad. Which is, you know, it's funny that we don't, we're okay with people making mistakes, or students are okay with making mistakes in a math class, but they're not in music. But that's a whole other podcast, right?

[13:11] So they would record themselves so that they could get the right take. And they record over and over and over until they were happy, which is something you can't do live because live is just one shot and then you're done. This was really an interesting phenomenon where a lot of times we're required to be assessed as students and performers. And there's so much anxiety that goes into that. The performance anxiety is a whole area of study that, and performance studies and musical performance and, and sports and all those things that, that really has some potentially negative effects on people. And I've found that the recordings allow students to get rid of that big stressor of messing up.

[14:06] Also remember, I'm working with teacher or like future teachers. So a lot of them are perfectionists and they've been the teacher's pet. A lot of them have been the teacher's pet their whole life so they don't want to disappoint people. And so that has allowed them to find success without as much stress, or at least maybe different stress because they have to do it over and over and over at home. This relates to practicing. And a lot of times like in a choir or a band, a lot of students have very, very bad memories of having to sing their part for their teacher or in front of the big group or play their part. Because it's just really stressful.

[14:53] And so instead of doing that, I've had students submit recordings of themselves doing their part so that I can assess that. And what's been very fascinating is that students

practice more when they have to record by simply just recording. So what I mean by that is because they're trying to find the perfect take, they play the part once. It wasn't right. So they play it again and it wasn't right. And then they play it again and it wasn't right. And then they finally played it and they did it right. So that means that means that they practice five times. And if they have to just do it live, they might practice three times and then give up. Because for some reason in music, we think that three times and then you can move on, right? I don't know.

[15:48] So yeah, you mentioned about my music, my virtual ensemble. And that's actually why I started putting together those virtual ensembles. What my students had to do was play the ukulele and prove that they could play a certain song. And so they would then submit that, actually it was on recorder. It was on the that plastic instrument that most people learn in fourth grade. And so we took, I took an easy song and that was like five different notes. That's all they had to play in different rhythms. And they would have to send me a video of them playing their song. I can also send you a link to that too, so that we could share that. But they play to a click track. And I made this practice video of, "alright," I'd look into the camera and I'd be encouraging like, "Get ready to play, one, two, ready, go." And then there will be a click and they would be listening on headphones and they'd play along.

[16:49] Again, when they had to do this live, they were so stressed out. And if they got one note wrong, their grade went down. But allowing them to record it, they could play it over and over and over until they were happy with their submission. Sometimes they were perfect, other times they weren't, but they were able to choose that. After I got all those videos, I'm like, I'm going to compile them into a virtual choir like Eric Whitacre did. And the day after the test was due, or not the day, because it takes a little bit longer than that, but I would then send that, I would show that video in class. And actually one of the things, though, as a choir, as a singer and as a choir teacher, one of the things that I really liked about the idea of doing your own virtual ensemble is that you're not only learning your part, but you're learning other people's parts or all the parts. And so one of the benefits of that is that as a conductor, as you might be a conductor in the future, you see how each part fits in.

[17:50] If you, now, when you're recording, unless you record over and over and over again, you're kind of stuck in whatever you decide to do the first time or whatever your anchor track or your bass track is. And so you might not be able to sing it in the dynamics or the phrase that you want. But you can, you can learn different skills about editing to use equalizations and to use panning and to use amplitude to create the same effects. Does it

help you in being able to produce up your voice? I mean, maybe not, but you have other opportunities to do that. And so creating the, learning how to be a mixer or how to master sound for certain venues, helps you as a live performer because it changes how you listen. I don't do that work. The motor science, brain science, all that stuff. But I know there are people who do. And those are really fascinating studies.

Derek: [18:57] Wow. So let me circle back to the, you describe the kind of the virtual ensemble that you've put together with your students. And there was this moment, I think it sounds like where the students saw that they got to be a part of something bigger than themselves. And that's one of the things that I'm really interested in thinking about technology in teaching, is ways that we can turn our class from just a bunch of students into a learning community where they feel like they're learning from each other. They're producing something collaboratively. Are there are other ways that you've tried to kind of tap into that use of technology to create a sense of community among your students?

Christopher: [19:34] Absolutely. Once I started doing, there's two examples I'll give you, once I started doing this, some of my colleagues started to take note. And so I started to partner with my friend Cara Bernard at the University of Connecticut. And she and I kind of synced up our classes. And throughout the semester we had milestones that we were looking for. And one of those milestones was to do exactly what I told you earlier, of students had to turn in a recording of themselves showing that they could play something. And we use the ukulele and that's where probably how we met each other, or you heard about my work. So students had to choose how they wanted to show their proficiency.

[20:29] We gave students five different options and they could do something easy like playing chord one, two, three, four or one, and, and, four. They could choose how they wanted to play it, their own level of difficulty. And in my course, they all got A's if they could show they were proficient. So Cara at UConn did the same thing. And then we took all those videos and compiled them together. And then she and I sang "Viva La Vida." And we then had a viewing party the same day, two states a way, half the country away. And students were like, "I've never met this person, but it's so cool that they exist and they made music with me." And on some of them were wearing Purdue shirts and some of them were wearing UConn shirts. And it was really cool to bring two schools together singing a song they all had to learn for the class. So that's one way that we brought the community together.

[21:35] The other way is again, through that show-and-tell idea. I did a research study in, it

actually happened in 2013, but it was published in 2015 about how those show and tell ideas could build a community. And I had students, I gave them one directive, "create a music video." And then they had to do it. And it's a lot more complicated than that. But I discussed in an article about how I set that up and experiences that they had. One of the things that they noted, one of the things I found all the participants in that study saying was that "during that show and tell, it was cool to see each other's work. I was enjoying the creativity of my peers. It allowed me to show my peers a different side of me." Because this was a music education technology course. And so all the students play traditional Western art music instruments, or they sang.

[22:47] And so I had a flute player and a clarinet player pair up, but neither of them were singers and neither of them were pianists, but they knew enough. And so one played the right hand and one played the left hand of the piano. And then they layered them on top of each other. And they used a pitch correction software that's similar to Auto-Tune, to make sure that their voices sang the notes they wanted. And they put together this beautiful homage to one of the student's brothers, who was suffering from leukemia. And they put a slide-show video of them at the St. Baldrick's foundation, where her whole family shaved their heads in support of their little brother.

Derek: [23:33] Wow.

Christopher: [23:45] Like I remember the whole room like fighting back tears, dabbing at their eyes, watching this video. And in contrast, there were three students who, two tuba players and a drummer, and they decided to do Thomas the Tank Engine. And they, they did a bunch of cutscenes, as they performed. They recorded it, but then their music video was them doing cut scenes in different practice rooms across the campus. And it was just so silly and the whole room was erupting in laughter. And they saw a side of those students that they never got to see before.

[24:20] And then finally, another example was when a student took a recording of her horn recital backed by an orchestra and put a video to, she took of her best friend at a punk rock show. So the audio was classical, the video was punk rock. They did not align. But she'd then play that for her student, for her classmates. And in interviews afterward, she said it was, "It finally. It allowed me to make a political statement that music's just music." You know, she didn't really go too far into what she wanted, she meant by it. But she said, "I wanted to make a statement."

[25:08] And like no two people in that room had the same view of it. It's like going to an art show, going, "oh, I see this," "well, I see this." And then you get the artists and they're like, "I'm not going to tell you what it means." (both laugh) Because that's one of the joys and beauties of art is that it means different things to different people. And so that sparked a huge conversation of community that built our community. So those are musical examples of what I do.

[25:36] I do have one more example of how I built community and that's through video blogs, vlogging. So the Green brothers, if you're a big YouTube fan, you've probably heard of the Green brothers, the Vlog Brothers, who one moved across the country and they wanted to stay in contact, but they wanted to do a social experiment. And they decided to not have communications with each other besides video through YouTube. And they've amassed one of the biggest followings in the history of YouTube, and they are still vlogging to this day. I think they started in the, at the beginning stages of YouTube. So probably 2006. I wish I had my notes in front of me, so I can give you accurate dates. I'm sorry.

[26:24] But they've been doing this now for over ten years. And they're the ones who founded VidCon, which is an international organization that started in Los Angeles, I think, where tens of thousands people get together and talk about YouTube. So they just communicated through video. And then you saw a bunch of different collaborative vloggers get together like The Five Awesome Guys, The Five Awesome Girls, The Five Awesome Baristas, The Five Awesome Gays, the five awesome everything, in the late zeros of YouTube

[27:02]. And that's how Tyler Oakley and Korey from The Amazing Race met each other, became good friends. They started on The Five Awesome Gays together and would talk. Every person had a day of the week, Monday, Tuesday, Wednesday, Thursday, Friday, and they talk to each other. And I was like could we do this in a classroom? And so I started doing collaborative vlogging in my classes. What's been really interesting is that I tried it with traditional courses where we always meet together, but that's part of their homework, so they have one less other type of project. I've done it on online courses. I've done it on hybrid courses.

[27:45] One of the best like teacher evaluations I ever got was from my online course where one of the students said, "I've never felt closer to a group of students in any course, whether it was live or online than I did in this course." And I attribute that to the fact that the students

had to talk to each other through video on a daily basis. So if you vlogged on Thursday, you would watch, Monday to Friday, Monday, Tuesday, Wednesday, before you had to you to do your video. And it's as simple as that, just having conversation through video.

Derek: [28:17] So it's kind of a chaining of sorts, right?

Christopher: [28:29] Yup.

Derek: [28:20] Like your assignment is to kind of respond to the students who went right before you?

Christopher: [28:26] Right, right. And I have created a way of doing it so that usually you have to have double duty where you answer the last question, but then you pose a new one.

Derek: [28:40] Oh, sure. Okay.

Christopher: [28:42] So that's how I've run it, but you don't have to. You know, then there's this, well, what about privacy? Well, you could do unlisted if you want to keep using YouTube. Or luckily, in undergraduate establishments, most have educational forums like Moodle or Blackboard or who are you sponsored by? No, I'm just kidding. (Derek laughs) So you can do this privately too and while I had not done the research studies on live verse, I mean video versus text. It's anecdotally, it's very clear that the video helps students connect with each other, but it also has its own problems like that there's a little extra added stress, for a lot of students. There's a learning curve, but it's only a perceived learning curve because they think, "I didn't know how to edit my videos." Like well you don't have to edit your videos. But if you want to. Like half my, not half, but there are always a number of students who want to be a YouTube star. And so they're trying it out for the first time in a class where they're graded. And that stress kind of gets to them. And then I remind them all you have to do is talk at a camera.

Derek: [30:09] Yeah. Well and they probably I mean, my daughter follows a bunch of YouTubers. And some of these, I mean, they're young people, usually in their teens or twenties, but they have some serious video production shots, right? And these are, some of them are pretty low-fi, but a lot of them are pretty well produced. And so I'm sure your students have that in their head. I was struck by actually my second daughter, who, she was finishing fourth grade. And they had a little program at school where they talked about what

they wanted to be when they grew up. It was actually really funny. They shared what they wanted to be, what they would've said in kindergarten, and then what they said at the end of fourth grade. And I was struck, there were I think three kids in her grade who said they wanted to be a YouTuber when they grew up. That's a job?

Christopher: [30:56] I'm glad you said that because actually I start a chapter for the handbook just like that. Like as an educator, I have when, when I ask kids, what do you want to be when you grow up, I still hear the answers that I had as a kid. "I want to be a firefighter," "I want to be a police officer," or "I want to be a teacher," "I want to be a pastor." Now I'm getting, "I want to be a YouTuber," and that's something that's really exciting. And who knows if YouTube will even be around when they're an adult. But there'll be a new technology or "YouTuberness" will look very different, or even cooler, they can currently be a YouTuber with their parents' permission and help.

Derek: [31:38] Right? Right. Yeah. My daughter has a classmate who has, I don't know, ten thousand subscribers or something, right? Like that's a, that's an audience, right? That's a real audience.

Christopher: [31:52] Well, one of the fascinating things is like YouTubers, if you do a recital in college, you're stuck with whoever might be able to show up. But if you produce a YouTube video, you can have a potentially global audience. That's something that I've been really pushing my students to consider, like how does music education, what might it look like now that we can do stuff like this?

Derek: [32:23] Yeah, well, and that gets at the question, I've got a couple more questions for you as we wrap up. Given your work with your students and given the research that you do on how musicians use technology and social media and platforms like YouTube, can you draw out any other lessons for faculty in higher education? I'm thinking particularly kind of outside music or music education. Are there other things that you can, we can observe in how technology is changing how musicians work, that might give us some insight into the teaching that we do kind of across the disciplines?

Christopher: [33:01] Yeah, I think my use of collaborative blogging is a good example of that. So collaborative blogging has absolutely nothing to do with music. But what I did is allowed my students the freedom to be themselves and to be creative. And it was fascinating the ways they incorporated music into their own blogging. Some performed right in front of a

video camera. Some just sang acapella, some of their favorite songs like how Justin Bieber got his start. Others like challenged each other, which was really fascinating. And that was a thing that a lot of collaborative bloggers on YouTube did, like they say, "alright, today's challenge is, the cinnamon challenge." Or "stick your hand in a box and try to figure out what you find in there."

[35:53] But I did not prompt my students to do this the first time, but they started challenged each other. And I had a group who that's what they wanted to do, they challenge each other every week. And one of the challenges was create, change a rap into a ballad. And I got some of the most gorgeous music that re-purposed other music. And so it was really cool to see the creativity that they have. So this idea of using a technology, not for technology's sake, but to say how can you keep learning what you set to learn in this class, but use technology in a way that makes it better? And the other issue is that sometimes it doesn't make it better and it made it harder. Or "I ended up hating my classmates because of this project." Oh, great. Why? Why was that? Was it technology's fault, was it a personal fault, personality fault? And that's something that we also have to consider, if we don't have a huge success the first time, is this something that we throw out or do we try it again because we didn't use a technology right?

[35:10] So that's, those are some ideas. I've had, because of the, the virtual choir idea, I've had a lot of people say, "how can I use this in my classroom?" And so they didn't have students all sing something, what they did is they said, "how can you make a choral reading of something?" So you see a lot of those, a lot of, or there is a technique of shooting videos where you have one person say something and another person say the same thing and back and forth. A lot of political campaigns use that technique to get people's voices heard, a lot of activism videos and commercials use that. And so they had students create their own PSA, a public service announcement, or they had educational videos. How can we help each other learn the bones in the hand? And you know, what can you, how can you create something to do that?

[36:12] And that's one of the major things about this insurgence of media, that people use it to be better and create new things. You've got the work of Henry Jenkins who wrote this book called *Convergence Culture*. And in that, he wrote about how people were taking Harry Potter and writing their own stories. They were writing fan fiction. And they would send it to each other and give each other feedback. And they started to learn through sending each other that back and forth ideas. We do that in online courses, but everyone hates it. (Derek

laughs) Why do they hate it? I don't know. It might just be because they have to, right? But how can you tap into something like that? Then maybe instead of just giving someone feedback, you then take their favorite paragraph that they wrote and share it with the entire class. So it's not them sharing their favorite paragraph, but it's you sharing their favorite paragraph, which creates community. And then you can add on to why you thought it was good or why you thought it could use some work or that type of thing where then everyone's getting together and building each other up and challenging each other.

Derek: [37:36] Yeah, yeah. You know, this is powerful and I hear what you're saying, right. Like, we often see our students in non-academic settings engaged in real learning communities, right? In kind of really deep ways, right? This is how a lot of these YouTubers figure out how to do that editing, right, is say, watch other videos and they share and they discuss and they get feedback, right? It's all, it's a pretty natural way of learning actually to do it in community like that and to do it socially. And yeah, I do think that sometimes in an academic setting we strip, I don't know if it's the fun or the engagement or the autonomy, out of that. And so I love the ways that you're trying to kind of tap into some of these tools and methods and ways of communicating and bring those into your students' lives.

Christopher: [38:20] I think you hit the nail right on the head. I've tried to use like collaborative blogging in an authentic way of allowing, not telling students exactly what to do. Saying, OK, here's your schedule. That's what I'll give you. You have to get the schedule and you're getting graded on doing it. And they're allowed to choose their own topics or mold their topics or those types of things and they're allowed to, they're encouraged to talk to each other. And it's been really cool because a lot of times I see them saying, "well, I didn't know how to do this so my classmate helped me do this." And that's exactly what happens online, but the research that I've done with YouTube musicians is they would post something and they would say to people they like, "will you watch this and give me feedback?" Well, that's exactly what my students are doing, instead of asking me. So it makes my job easier too.

Derek: [39:13] Yeah. Well, thank you so much, Christopher. This has been really great. I've enjoyed getting to know your teaching context and some of the tools that you use. And the really amazing things that your students are able to produce together. So thanks for sharing here on the podcast today. (music)

Christopher: [39:25] Thank you for the opportunity, Derek. (music)

Derek: [39:30] That was Christopher Cayari, assistant professor of music education at Purdue University. I really enjoyed Christopher's practical advice for engaging students in technology mediated learning communities and our foray into the world of YouTubers. If you'd like to see and hear some Christopher's students' creations, we have lots of links in the show notes for this episode, including links to his virtual ukulele ensemble, and some examples of collaborative vlogging, which I'm particularly excited to try out in my own teaching now that I've learned more about it.

[40:03] If you'd like a deep dive into internet culture, including the world of YouTubers, I recommend the Gimlet Media podcast Reply All. It's full of well-produced stories about the ways that the internet is intersecting with and creating culture. Check the show notes for the link or search for "Reply All" in your favorite podcast app.

[40:21] Speaking of podcasts, I'd also like to recommend a podcast called the Anthropocene Reviewed from John Green, author and one half of the Vlog Brothers that Christopher mentioned in his interview. I have to admit I didn't actually know who John Green was before this interview. John Green is the author of *Looking for Alaska* and *The Fault in Our Stars*, among other novels. And I had actually heard of that latter one. I just didn't know who the author was. About the same time I interviewed Christopher, I learned about John Green's podcast from another podcast, the 99% Invisible podcast. The Anthropocene Reviewed features John Green reviewing facts of the human centered planet on a five-star scale, like things on Amazon or any rating platform anywhere. He reviews such things as the QWERTY keyboard, air conditioning, the Lascaux cave paintings, and the Taco Bell breakfast menu. The episodes are funny, insightful, and often quite moving. See the show notes for a link to that podcast as well.

[41:22] You'll find show notes for this and every other episode of Leading Lines on our website, leadinglinespod.com. We'd love to hear what you think of our conversation with Christopher Cayari and what you might do with the idea of a virtual ukulele ensemble in your teaching. You can reach us via email at leadinglinespod@vanderbilt.edu or on Twitter @leadinglinespod. Leading Lines is produced by the Vanderbilt Center for Teaching, the Jean and Alexander Heard libraries and the associate provost for education, development, and technologies. This episode was edited by Rhett McDaniel. Look for new episodes the first and third Monday of each month. I'm your host, Derek Bruff. Thanks for listening. (music)

