

Transcript

[0:01] (music)

Derek Bruff: [0:06] This is Leading Lines. I'm Derek Bruff. Last summer I emailed a couple of colleagues here at Vanderbilt and pitched an idea, a one day symposium on games for learning and social change. Helen Shin, Assistant Professor of English and Derek Price, doctoral student in German and media studies, were immediately on board. And pretty soon we were making plans for the event, which we called Learning at Play. Leading Lines listeners may know those names. We interviewed Helen back in episode 24 about the digital projects she invites her students to create. And we interviewed Derek in episode 34 about the games studies podcast, he helped start called, "Scholars at Play." With our planning team in place, we started brainstorming potential keynote speakers for Learning at Play. At the top of my list was Mark Sample, Associate Professor and Chair of Digital Studies at Davidson College.

[0:59] I had followed Sample's work in the digital humanities for years through his informative and sometimes provocative blogging and tweeting, I wanted to finally meet him in person and more importantly, to share his work with the Vanderbilt campus. One of the things I admire about Sample, is that he doesn't just write about games and electronic literature and algorithms, and such things. He also creates digital objects, often taking an experimental and even playful approach. For instance, last fall he created something called Ring Log, which imagines what a Ring doorbell camera might report as it uses glitchy artificial intelligence object recognition technology, on Halloween night. When you load the website, you see a black background with green text that's ever changing. "Ninja assassin," "smashed jack-o'-lantern," "crying child," "unidentified flying object." It's an addicting and slightly creepy commentary on the limits of artificial intelligence and the problems of surveillance tech. Mark Sample's games and other experiments make arguments and they make you think and I wanted him to bring his scholarly playful work to our symposium. Luckily, everything fell into place and Mark was able to join us for Learning at Play. He shared a really fascinating keynote

about another project of his, a work in progress, a counterfactual game built-in Twine that explores both the early twentieth century eugenics movement and the early twenty-first century science of gene editing.

[2:26] Learning at Play turned into something pretty spectacular with games and talks all day long and a great turnout from the Vanderbilt community and beyond. I had hoped to get Mark Sample on the podcast while he was in town, but the day turned out to be so busy that that didn't happen. But he and I got to catch up via Zoom earlier this month. And I'm very excited to share our conversation with the Leading Lines audience. We talk about teaching digital studies, designing counterfactual games, and learning through play. As you'll hear in the interview, Mark Sample is an incredibly thoughtful educator, and I'm glad to have him here on the podcast. (music)

[3:02] Well thanks, Mark, for being on Leading Lines and thanks again for coming to campus last fall to join us to talk about some of your work at our Learning at Play event. It was really great to meet you in person, finally.

Mark Sample: [3:17] It was great to be there. I'm so happy to be invited and share my work.

Derek: [3:22] Yeah, it was a fun day. We had a ton of people come out. But I wanted to follow up with you and ask some questions about your work and kind of how you think about educational technology and teaching and learning and digital studies. But I'm going to start with a question I've been asking some of our guests lately, that asks you to look back a little bit. Can you tell us about a time you realized you wanted to be an educator?

Mark: [3:49] (laughs) That's a good question, when I wanted to be an educator. So I'll actually tie this directly to educational technology as well. So my mom was an educator at a public school. She was the special education teacher for many years in an elementary school, and then later went on to be a guidance counselor in middle school. But about this time, I was maybe I think, in fifth grade. And, you know, the time, the year, was 1982. I'd have to do the math in my head, but it was it was early. And my parents took the plunge to get a home computer because I think, at the time, they could write it off as a kind of tax deduction or something because my mom would take it into her classroom several times a week for her students to use. And I just, this was our first computer was a TRS 80 color computer. It had 16K of RAM. And I remember feeling really cool when my dad and I upgraded at the 64K of RAM. It had a cassette player, was how you stored the programs.

Derek: [5:02] Oh, wow. Ok.

Mark: [5:03] So it was even before floppy disk. Anyway...

Derek: [5:06] I'm from the five and a quarter inch floppy disc era.

Mark: [5:12] So my mom would take it take this, the computer into class and there'd be these kind of cartridge games like some sort of Bingo Math Blast or I can't remember exactly. But then I started making quiz games in programming in Basic for her to take into the students. And, you know, in hindsight, I'm sure it was like horrible. There's no kind of sound pedagogy behind any of that, it was just the novelty of it all. But I mean, that is like literally the first time I was thinking about computers in the classroom, I was in elementary school myself making these Basic programs for other kids.

Derek: [5:54] Yeah. That's fascinating. And I mean, you've edited a book on Basic, right?

Mark: [6:00] Yeah. Yeah. So there was this ten print within a very, an extended long title. It was this one line program for the Commodore 64, which is also a home computer around the same time. And I and nine other authors basically dove deep and tried to see the entire world with this one line of code and use it to talk about all sorts of things like creative coding, mazes, because the program created a maze, the rise of home computers in the 1980's and so on.

Derek: [6:36] Yeah, yeah. Well, and I'm also hearing in that story something that I've seen in a lot of your work, which is a willingness to learn something new and experiment a little and kind of see what you can do with it.

Mark: [6:46] Yeah, I think I get bored easily, so I'm probably not the best poster child for this because I'll do something and then feel like I've kind of got it and then I'll move on to something else. But I mean, that's why working within digital studies, which is kind of like digital humanities, but not necessarily always focused on digital methodology. It's more like studying digital culture itself. There's always something new to talk about, and to analyze and critique. So I stay on my toes.

Derek: [7:21] Yeah. Yeah. I'm wondering, do you think, so you got your start with computers in an era of Basic, right? And so because I did too. I remember I would go to the Book Fair at school and they had some series of books, it was like sci-fi for third graders or

something, but there were Basic programs printed in the book. And part of the fun was to take your book over to your computer and type in the program and then kind of see what it did. And so it was this kind of, this very interesting interaction. So here's my question, though. I wonder, do you think part of your willingness now in your career to experiment and learn a new technology or kind of kick the tires on something, you think that comes from getting your start in an era where, it was, I'm trying think of the right description, but like so much now is encapsulated, right? So you have an app and like you're, you're layers and layers away from the programming that kind of makes that app work. But when you got your start, it was yeah, ten print, "go to this line," right? Like everything's just kind of right there in a kind of tinker toy fashion. What are your thoughts on that? Do you think that's affected how you think about computing?

Mark: [8:38] I think so. And I actually talked about this a lot with my students. And I try not to come across as the kind of grumpy old man like, "in my day, we opened up our computers, installed our own RAM and CD drives." But I think it's important for students to realize the shift that has happened with technology, these kind of walled gardens, and make it ever more difficult to, to actually understand what's happening inside the computer, it becomes a black box. I talk about that concept a lot. So I think a lot of the, my emphasis when it comes to educational technology is also trying to open up that black box, getting people, students to think about what's happening underneath the surface. Because that era definitely influenced me, like knowing that I can write a small program in Basic. I tried assembly language at the time and had no idea what I was doing, but Basic I could understand. And you know, that physicality of being able to open up the machine. We also installed a new keyboard on it because it came with this really bad keyboard. But just understanding that that technology was not, it was yours. I feel like our devices now, in some sense, we feel like we're just borrowing them from Apple or whoever. And in two years we'll trade it in and get a new one. It feels like we're leasing. So I mean, even though we buy it many times, it feels like a lease product because we don't actually get in and kind of make it our own.

Derek: [10:18] Sure. Yeah. Yeah. Well, and the software updates, whether we want it to or not, often. And so it's hard to take the reigns, I think, with some of these devices. Let's talk a little bit. I'm going to ask you about a couple of projects of yours later, but let's talk about more about kind of how you work with your students. So you are, you teach in and chair the digital studies program at Davidson?

Mark: [10:46] Yes.

Derek: [10:47] So I'm gonna ask a big question and see where you take it. How do you go about designing and teaching a digital studies course?

Mark: [10:57] Well, I mean, I go about it really the same way I used to design my English courses because I used to be in the English department at George Mason University and slowly kind of incorporated more technology. My classes and my, my official line at the time, I was hired under was Contemporary Literature: New Media. So it gave me free reign to do a lot of things. And eventually I moved evermore into New Media, which is what we called it 15 years ago. But my approach is really, and I think in some ways this is even easier to fall into a certain kind of trap when you teach literature classes. Let's say I was teaching a new literature class, 15, 10 years ago, I would often start off by like, oh, here are six novels I really want us to read rather than thinking about, okay, what do I really want us to walk away from in the class? So there's a principle and I know, you know, and I've written about it, the backwards design. That idea of kind of just really thinking about what, what is the outcome that you want in the class. And I know a lot of people react negatively to learning goals or learning outcomes or objectives. But I think it makes a lot of sense like what do I want us to be able to do by the end of the semester or be able to know what are these kind of enduring concepts that ten years from now, 15 years from now, I still want the students to remember? They're not going to remember the details, but these big broad concepts.

[12:32] So I started doing that with, when I was teaching my literature classes and when I shifted to kind of mostly entirely digital studies classes, it's really along the same lines. So when I teach a class, like the Introduction to Digital Studies is a good example. In the wake of 2016, the election of 2016, I felt like I needed to redesign the class. And this was also at the time that the QAnon, the rise of the conspiracy group QAnon, I felt like, wow, that's something we need to talk about. So I developed this whole section on conspiracy theories and how the digital world makes it so easy to propagate, disseminate, and distort facts and everything. And that was entirely driven by this kind of enduring concept that I wanted students to have at the end of the semester.

Derek: [13:28] And in that case, what was that concept?

Mark: [13:32] I mean, the concept was, was really just about how knowledge disseminates and distorts through social media.

Derek: [13:45] So with something like that in mind, what kinds of assignments or projects or

activities do you give students?

Mark: [13:51] One of the things that I found really effective was to start working with case studies. This specific class was a Monday, Wednesday, Friday. So I started having every Friday be like a case study day. And so for the first few weeks of the course, I developed these case studies where students are assigned roles. Like one of the first case studies was about the dark web, using Tor and getting information online. I assign these students like someone, someone was a hacker, someone who worked for the NSA. Another student was a concerned parent, like just different roles and a little blurb about each role. And the students worked in groups. And there was like some sort of crisis that they had to figure out what the best path forward was. And in the meantime, they also had to get online using Tor, the Tor Browser and kind of like explore the dark web. So I did like three of these case studies maybe. And I vary them up, like one was a senate hearing about social media and political ads on social media, which was very hot at the time. And then after that, after I gave the students a taste of how to run these case studies, I made them responsible for making their own. So I divided the students up by groups. And then, like every other week for the rest of the semester, there was a case study that the students had to host, they had to plan the whole thing. They had to run it in class and manage it. And then at the end the class, or after the simulation was done, they had to write up a whole kind of synthesis of what happened, how it went, did it really measure up to their expectations? Did they wish they had done better? Very meta stuff. And that was really effective. Practically speaking, it worked well for me because it was a major assignment, but it came in clusters, so at any given time I only had like five to grade. And then some of the case studies like I will modify to use as my starting case studies the next time I teach the course.

Derek: [16:04] So I want to unpack that just a little bit. Because I mean, this is similar to some of the stuff we were talking about at Learning at Play, these kind of in-class simulations, role play kind of things. So not just a debate, but a debate kind of where students are, are taking on particular roles or particular perspectives. What value do you see for learning in a simulation like that? And then part two, why do you ask students to create their own? I suspect those are different but complimentary values.

Mark: [16:40] So I mean, a couple of things are really important to me. One, is many times the students are playing roles that are contrary to their own positions. So it forces them to be a little, like if they want to be successful in the case study, they have to be a little bit empathetic to that point of view. So it forces them to think about other perspectives, which

I think is very valuable. It also puts a little pressure on them. They often like before the case study runs, they have a little bit of time to kind of absorb the roles and do a little bit of research on it. So it gives them a crash course and thinking about this particular topic and that particular perspective. And the question of why have the students do their own? I just think even, even when they, the case studies are failures in class and I have a few that had flopped. The students learned so much just from that perspective of having to do all the research, try and manage the cloud. They certainly get a deeper appreciation for what professors and faculty do. But also there's no better way to teach something, to learn something than to teach it. I mean, I think that's been proven again and again and again. And the case studies are basically a chance for the students to become teachers for the day.

Derek: [18:01] Yeah, yeah. What are some other things you have students create or produce in your courses? Because I see that as a strong element of your teaching, that students are making a lot of things during the semester.

Mark: [18:16] They are. So like this semester, I'm teaching a gender and technology class which is studying the intersection between gender and technology and how technology is gendered and the biases built into social media algorithms and so on. I mean, it's, it's a broad topic and it changes everyday because there's always so much to talk about. But the, the final project for this class is going to be the students working in Twine, which is this game development platform that I talked about before. And it's very easy for students to go, or anyone, to go from like 0 to 45, making it kind of choice based, mostly text-based game. So you can have a, you set up a scenario, give the player certain paths to navigate through it. And you can have variables and keeps score and, and do all the stuff that you can do in games. There's conditional logic. You can incorporate media.

Derek: [19:18] So for other children of the eighties, you might think of *Choose Your Own Adventure* as kind of a starting point. Like you guys do that in Twine, but you can do more than that.

Mark: [19:26] Exactly. In fact, the more my other classes were actually reading, *Choose Your Own Adventure* books, right? My classes are all about me teaching my middle school years to my students. But anyway, so Twine, students are going to have to make like, interact, I'm not calling them games because that puts a lot of pressure on them, or even stories. Vignettes, interactive vignettes to try to capture some, some dynamic where gender

and technology intersect. So we're going to be talking about representation, women in video games, for instance. We're going to talk about Gamergate and the backlash against women in the game industry, in general. And I wouldn't be surprised if some students make the game from the perspective of say, a female game journalist or something like that, or a trans game designer. So they'll be. They'll be small things. We're going to share them with each other. They'll be a chance to kind of present to the broader campus. We have this big kind of teaching and learning day at the end of the semester. But I really, I started doing this because I mean, I do similar projects in a lot of my classes. Because I feel like my students, at least, they're pretty strong writers. They know how to do that research essay. They know how to do the kinds of typical kinds of writing that got them into college in the first place. They've gotten pretty good at. And I don't feel like they're ever really flexing their muscles anymore, their intellectual muscles.

[21:12] So I like to push them into something where they're out of their comfort zone. But they're also making something that is designed to be interacted with. Like I think most people write an essay expecting no one is ever going to read it except maybe the professor, right? But you don't make a game expecting no one to play it, right? It's inherent in the game that you want it to be like enjoyable or playable or at least thought-provoking. So, you know I get some negative reactions sometimes. Students feel like come March and April, they would like to be in their comfort zone. But in the end I've, I've just had such a positive reaction from the students. And when the days that we share their games in class like they're just, they're excited to share their work in a way that they're not when they share that ten-page essay.

Derek: [22:08] Sure. Yeah. Yeah. Well, and we've had a few folks on the podcast who assigned podcast projects for their students. And one of the reasons is so the students have a better sense of audience for their work. They're creating this audio thing that is intended to be listened to. And so it does, I think it kind of breaks them out of this, kind of habit of writing for no one that you've described. And so I have thought about games as, you know, also having that flavor, right? That you're trying to help them. There's a natural audience for a game, right? I would imagine on some level, even if you don't, actually, if you're a student and you've built a game of some sort, and you don't actually have anyone else play it, just knowing that that's what it's intended for, probably helps you think differently about how you're making your arguments, how you're constructing things, how you're putting ideas together.

Mark: [23:00] Yeah, I mean, I've seen students working on projects like this where they they'd like they get a kick out of playing their own games. And like exploring the choices. And there's

this kind of thrill seeing, "oh, that thing that I tried to do is actually working here." Which I mean, sometimes I think people, like writers, who like really approach writing as a kind of puzzle process. It's kind of this intricate design that you're, you're bringing into being. I mean, you get some of that pleasure in reading your own writing. But I don't think most students at this level do.

Derek: [23:40] But they can in a game.

Mark: [23:43] And it's their vernacular. So many of them have grown up playing, even if they don't consider themselves gamers, many of them, are familiar with basic game mechanics and concepts.

Derek: [23:52] Yeah, yeah. The students you have in digital studies. I'm imagining, I think from our conversation when you were on campus, they come from a fairly diverse backgrounds, like you have a few majors, but you also have students who are picking up these courses or doing a minor. So I'm wondering, can you talk a little bit about how you teach a class with students who have diverse backgrounds, maybe even specifically the kind of students who have coding experience versus students who don't.

Mark: [24:21] So that's a really good question and I'm kind of living that right now. One of the other classes I'm teaching this semester is called Electronic Literature. And it's, I mean, it's about digital art, digital fiction. You know, using the medium of the story of the computer to tell stories and poetry in a way that you can't in print or other forms. But the class, so it's in digital studies, but also counts for English, for the English major. And when we're going around the room, on the first day and everyone's talking about their majors, I was pleasantly surprised at how evenly divided it was between people in English and in computer science. So I had this, this pretty nice mix in there. They're also, excuse me, other majors in there, as well. But I think it's dominated by English and computer science. And I don't see those things as polar opposites, whatsoever. So in class, like when we're looking at a specific work, I'll ask each student to kind of bring what they know to the table. So the English student might be talking about representation or the kind of thematic devices being used. Whereas someone in computer science might be actually more curious about what's happening underneath the surface. How does this little mechanism work? And then I'm always pushing the students to think about form and content. So how, how does that underlying kind of procedural logic actually support or maybe not, the, the thematic content of whatever work that we're looking at. So I see those things as complimentary a lot.

[26:00] Some of my other classes like the Introduction to Digital Studies, it will be a broad mix of students coming from everywhere. A lot of times I have computer science students in the class who, when we're talking about privacy or surveillance or data ethics, they're like, "wow, we never talk about this stuff in computer science." Not because the computer scientists don't care about it, but because they have all this other stuff they need to get through.

Derek: [26:25] Right. It's just not in the curriculum these students have experienced.

Mark: [26:29] So, so they get to talk about it. But yet they can also bring like when, when someone's spouting off on, "computers can do this" or "AI is this," they'll like chime in and say, "no you're misunderstanding what AI is." So I like, I mean, I think it's really valuable to be teaching in kind of a liberal arts environment. I'm happy. I know like a lot of departments and programs measure their success by majors, like so. And then that's a trap because when your majors decline, even if it's just a blip, you feel like, oh, we have a problem. I just think in terms of overall enrollment, like how our classes are, they're brimming, over-spilling sometimes. And I feel like the things that we're teaching in the digital studies classes are so important I want everybody across the curriculum to thinking about these things.

Derek: [27:30] Yeah. Well, and I think that's the, you know, one of the strengths of a liberal arts environment is that it encourages students to major in something, but also to, to think more broadly and make connections to other disciplines. And it also sounds like you're using, when you have students make something, you're often using tools that are more accessible or easy to learn.

Mark: [27:51] Yeah.

Derek: [27:52] You're not assuming a huge programming background among your students.

Mark: [27:54] Right, I mean, that's just me. So I have colleagues who another colleague in digital studies who he himself has the experience. So he's teaching a game development class and it's like hardcore. They're working in Unity. And he, you know, there are some prerequisites to get into the class. But that, you know, that's like a 300-level class or something. In general though, I do like to work with the tools that students can feel a sense of accomplishment with, pretty early on. But then there's still a lot of room to add finesse and polish to whatever they're working on.

Derek: [28:34] So for something like a Twine projects, like in your Gender and Technology

course, how much of your class time do you spend helping students learn to use Twine or troubleshooting or debugging?

Mark: [28:46] Yeah. That's a good question. As it is, you know, so I have the syllabus as the ideal plan that I've set up in January. We'll see how it plays out in February and March when I will probably have to change it. But I kind of stagger things and this gendered technology class because it's not a, it's not like focused on game production or game design. But early in the semester we just, we have this section on, on games. So we'll start talking about representation and games. Games that try and capture experiences that aren't seen in mainstream games, different perspectives and identities. And at that point that's when I introduce Twine. And I'll give them kind of like checkpoints then throughout the semester. So by, you know, by this point, three weeks from now, you'll need to have done X, Y, and Z, and so on. And then throughout the semester I'll have like occasional class days where it's just like a Twine workshop where I work in class on Twine.

Derek: [29:52] Yeah. Yeah. That makes sense. And I think it sounds like it's a big enough part of the course that, like you're willing to spend some time teaching the tool.

Mark: [30:03] Yeah. And I think I mean, Twine, I like in particular because it's been, it's been such a force in indie game design, where people are making games that just like what's it like to go through hormone replacement therapy? Like there's a game about that. So the topic fits in really great with gender and technology. But it's also like we can think about Twine itself as this kind of platform for marginalized voices.

Derek: [30:39] Yeah, so they're encountering games designed in Twine, right? And then designing their own. So there's this nice kind of symmetry there. Let's talk more, a little bit more about a game as a, as a vehicle for teaching. When you were here on campus, you shared a game you had, you were developing, in Twine, actually, that looked at, well you called it a counterfactual game. Can you say, kind of describe what that is and how you think a game like that might serve as a teaching tool of some sort.

Mark: [31:11] So a little bit of background on the game. I'm creating this, as you say, a counterfactual game, which is asking like a what if question. And the general question is, what if the gene editing technology that we have today, like CRISPR, had been invented at the height of the eugenics movement in the 1920's in the United States and, and elsewhere in the world. So it's kind of collapsing the present onto the past. Where I see, I see echoes of each

other in these two time periods. And it seems very relevant today when gene editing and DNA testing, like it's just kind of all over the place right now. So it's an important topic. And I feel like is the opportunity to also understand the past better. Just to kind of realize where some of the ideas that we have now about, about genes and about DNA and hereditary lines and all that, where they come out of, or at least where they've been influenced by. So that's the kind of background of the game. And, uh, and I like the idea of a counterfactual game because it just kind of opens up the door for me to, to play a little bit loose with the facts. I think when I, when I was talking about this at Vanderbilt, I mentioned a counterfactual novel by Colson Whitehead, called *The Underground Railroad*. And in that novel, *The Underground Railroad* is an actual railroad that literally runs underground. He kind of takes that metaphor and literalizes it, and then kind of plays around with it. And when I had seen him talk about the novel, when it first came out, I went to a reading and a lot of people in the audience didn't quite get, they thought he was just a bad historian. They thought he got his facts wrong.

Derek: [33:15] (laughs) Like a really bad historian. I mean I thought it was an underground railroad too when I learned about it in second grade.

Mark: [33:20] Yeah. Right. I mean, it's a mistake that we make. And then he explained it. He said, no, it's a metaphor. I'm working with it. And he said at some point in the Q and A, "I didn't stick to the facts, but I stuck to the truth." And that line really resonated with me. So I feel like thinking about this counterfactual game that I'm making, I'm playing a little bit with the facts, but I want to capture the kind of truth of the era of both the current era and the 1920s. So I've done a lot of research about the eugenics movement, about fitter family contests, better baby contests. The kind of the push for voluntary and even for sterilization of "feeble minded." On the podcasts you'll have to tell people I'm doing air quotes right now. "Feeble minded individuals and the people unfit to have children." So it's involved a lot of kind of primary source research for myself. And one of the things, so going back to the idea of like, wow, what can you learn from this game or how could this game be kind of valuable teaching tool?

[34:41] One of my goals for the game is, to make it a way to interact with archives, like I'm trying to come up with like playable archives. So in the game, some of the early scenes in the game take place at the North Carolina State Fair. So I did a lot of research on what was going on in the state fairs in the 1920's, and many state fairs, not North Carolina, as far as I can tell, had contests related to eugenics, fitter family contests, they would have displays about, now

we would recognize it as propaganda against immigration, against, you know, there's a lot of class issues going on, as well. And I want to incorporate some of those primary source, that primary source material into the game. So I'll have like basically a recreation of one of these posters that, that the player can then interact with. And there's one scene in the game where there's this, this, it was a real-world thing. It was displayed at various fairs and expositions and the era, with these three flashing light bulbs and they blinked according to how often like fit people were born versus how often unfit people were born...

Derek: [36:06] Wow.

Mark: [36:07] ...versus like some other thing. So the unfit flashed light is flashing like every 30 seconds or something and the one with fit people was being flashed every seven minutes, I can't remember exactly the numbers. But anyway in the game, so I can recreate this. And then the player has a chance to vandalize it. So they're not, they're not only kind of playing, like kind of interacting with the archives, but they get to like destroy them. So I think it's a, really, my hope is it's a really good way to kind of make history come alive. But to also give players a chance to like, "So what would you do if you were in this time period? Like how would you react to this circumstance?" which I think is a good question to ask.

Derek: [37:03] Yeah. So I could ask a lot of follow-ups, but something that comes to mind is actually something I saw Nick Susanna's tweet a while back. He created the book on flattening. It's a comic, right? This was actually his PhD dissertation. It's a comic about kind of learning and visual thinking. And he found that as he was doing this research, he didn't want to write a traditional dissertation. He needed the visual medium of comics to kind of represent the ideas that he was trying to put together. But I remember him tweeting this question, like he was kind of nearing the end of it. He was like, "How do I do footnotes in this medium?" And I imagine you're facing a similar challenge, right? If you're creating a counterfactual game and you want players to interact with archival material, how do you do footnotes and how do you help them understand what is more or less factual in what they're encountering?

Mark: [38:08] Yeah, no. I have been thinking about this because one, it's just kind of selfish. Like I've done a lot of research. I want people to know I've done a lot of research.

Derek: [38:19] You're not just making this up.

Mark: [38:20] And I want to cite the sources and I want players to be able to backtrack. So at

the very least, there's going to be an extensive kind of "About the Game" that's going to include all the sources and links back to everything. I could. I'm definitely not at this stage yet. But when it's completed, it would be interesting to have like the kind of director's cut of the game that has a second series of hyperlinks built into the game, where you could like touch or hover your mouse over a certain link and maybe a little pop up will give more information. I haven't figured all that out yet. But I am I'm like, I mean, I use Zotero as my citation, bibliographic management. And so I like all my sources are there in Zotero for me to use when I need to.

Derek: [39:24] Yeah. I do like the idea of like a director's cut or to stay in the medium a little bit like when you beat a game, like a video game, a console game, often you can go back and play it again on a harder difficulty level. And so to be able to like finish this game and then go back with this other layer to it, I think could be really interesting. Yeah. So I want to ask you about another project, this one goes back a ways. And this is maybe a little selfish just because I actually talk about this at my workshops a lot. So years ago, I realized it's been many years now. You wrote a blog post, I think for Prof. Hacker, back in the day, about how you were teaching a sci-fi course at George Mason. And you had your students watch Blade Runner and live tweet their experience during the week. And I think it's a really interesting example of kind of making student learning visible, kind of in the moment, in ways that you might not see in a response paper they would write or even a class discussion later that week. And so looking back on that activity, what's your assessment of it now and are there elements of that activity that you still use in your teaching?

Mark: [40:30] Oh, that's a really good question. And it does go back. That would be like 2010 or 2011, or something like that. And, you know, I've stopped, for a while there, I was using Twitter in my classes quite, quite a lot. And I've stopped doing that because I don't, I, myself spend far less time on social media now. My students definitely don't, at least not Twitter. I think they're on Instagram or Snapchat. But they kind of have a reaction too, they don't want to really be on Twitter, most of them. So that question of how to capture that live experience, I think it worked really well. In the case of like, the specific example you're talking about with with Blade Runner, I had archived all those posts at the time. At the time, Twitter actually made it quite easy to, to like capture posts. So I was, not so long ago, upgrading that class blog, which is still around because, you know, unless I upgrade it, it's going to be invaded by the latest hacks or whatever. And so I was going through the posts from Blade Runner, I thought, wow, that was really cool. There were some really kind of spot on stuff and some playful things. And I, and I miss that because it helped. I think it helped build a sense of

community. It was a different kind of a voice for the students. Like they've, they just felt like they could be freer. They were often more sarcastic, which is I think great because it's like that attitude is often missing sometimes in classes where they just talk about things in a flat kind of not engaged way.

[42:19] So I haven't really found a good way to recapture that. I still have my students' blog, which I, I've been doing that for, for years now. But that kind of on the spot type of, or on the fly type of lightweight engagement, I haven't done. I've thought about, and I know some people who use like Slack, like they'll create a Slack channel, actually, I just lied. I have used Slack in my classes. One of my classes, maybe I've done it three years. It's like a smaller seminar class and we set up a Slack for it. And one year it worked really well. And then the next year, students just weren't engaged. Like that's just not how they wanted, I think, communicate or spend their time or it's a little bit to workish or something. So I have tried to recapture that and I just haven't been able to.

Derek: [43:25] It's an interesting challenge, right? Technology's changed the students change. And I think this, this goal of making student learning visible in these ways, is really great. But finding the right tool that feels comfortable for students, especially if you're wanting them to kind of let their guard down a little bit, right? It's not, it's not construct a 140, 140 character mini essay. right? Like that's, that's a different kind of assignment on Twitter. But this was meant to be kind of in the moment, casual.

[44:00] Well, ok. Well, I'm going to wrap up. I've got a couple of questions we ask all of our guests, and I don't know, maybe there's a segue here, but Leading Lines, we say we're trying to shape the future of educational technology. I don't try to predict it because I think that's a fool's errand. But you know, we're the folks who, in your case, you're making things, you're building things. Where would you like to see educational technology go in the next five years? What would you want from that future?

Mark: [44:33] What I would like, a stronger sense of ownership of that students feel over their technology and the kind of data exhaust that they emit when they're engaged with educational technology, whether it's on course management systems or class blogs or something. So I feel like really compelled to pursue that and to encourage students to think about that. So when students like after the end of the semester, they want to erase their blog post, I'm sad, but I understand, understand that. In terms of like actually in the classroom, you know, I always say, and this is still true like in many of my classrooms, the most important

piece of technology is the wheel on the tables, so that we can move the tables around the room and reconfigure ourselves as needed. Because I think that flexibility is, is really important. And I think a lot of educational technology actually makes things less flexible. Like we have to contort ourselves in order to conform to what the technology is asking us to do, or expects us to do. So, so wheels are the opposite of that, we can move things around. So any other kind of educational technology I'd, I'd want to use or see in the future would be something that's that conforms to us and what we need and not the other way around.

Derek: [46:15] Yeah, I love that. I love that. I'd said the same thing about wheels on chairs, being the most important technology in the room. And that's actually my last question is about one of your favorite analogue technologies. I think actually analog educational technology. So I think you've just answered that question as well.

Mark: [46:33] Although, I do want to put a plug in for the personal whiteboards.

Derek: [46:38] Yeah, say more.

Mark: [46:40] Maybe two by three kind of whiteboards slates. So some of the classrooms I teach in have those and I often will have students like do kind of makeshift things on those slates and it's easy to stand up and share them. That has been one of my favorite non-digital tools.

Derek: [46:58] Like what would you ask students to do on that? I've talked to some science faculty who love those small portable whiteboards.

Mark: [47:08] So in digital studies I have to teach, I'm kind of obligated to teach Black Mirror episodes.

Derek: [47:11] (laughs) Ok, yeah.

Mark: [47:16] So sometimes I'll have students like basically we watch, a 30-second or two-minute clip or something of, they've seen the episode and then they watch the clip in class. And I'll have them kind of draw the key scene from that clip and kind of annotate it. And then we stand up and we go around the room and talk about it. And it's just, I mean, asking students to draw is kind of like childish, but they really get into it. I find that students always are able to talk more about things when they have something concrete to point to. So like,

you know, when the class discussion stalls, ask them to write something and then you know they have something to say. I think doing drawings on the whiteboards is similar.

Derek: [48:00] Yeah. I love that. I love that. Well, and as someone who, who sketch notes a lot in my own practice, right, to be able to kind of see the scene. And then even if it's just stick figures and circles and boxes, kind of what do you see that's important here? And what are you pulling out of this scene? And they have to make those choices as they draw it. And then to add some annotations to it so they can kind of do that critical work as well. I love that. I love that a lot.

Mark: [48:26] Yeah, it's fun.

Derek: [48:28] Well, thank you, Mark. This has been a great conversation. We're really glad to have you on the podcast and yeah, yeah, thanks for taking sometime today. (music)

Mark: [48:35] Great, thanks. It was a pleasure being here.

Derek: [48:52] That was Mark Sample, Associate Professor and Chair of Digital Studies at Davidson College. Thanks to Mark, for taking the time to talk with me on Leading Lines and to be a part of our Learning at Play event in November. If you'd like to learn more about Mark Sample and see some of his work, head over to his website, samplereality.com. There you'll find more than a decade of blog posts along with links to his scholarly work and creative projects like that Ring Log I mentioned in the introduction. As someone who spends perhaps more time on Twitter than I should, I'm partial to the dozens of Twitter bots he's created over the years. They keep my Twitter feed lively. For more on Twine and counterfactual games, see my recent blog post recapping Mark Sample's keynote at Learning at Play. See the show notes for a link to that blog post as well as links to more about Mark Sample and the Learning at Play event. You'll find show notes for this and every other episode of Leading Lines on our website, leadinglinespod.com. We would love to hear your thoughts on this episode and the ways that you use games in teaching. You can reach us via email at leadinglinespod@vanderbillt.edu (<mailto:leadinglinespod@vanderbillt.edu>) or on Twitter @leadinglinespod. Leading Lines is produced by the Vanderbilt Center for Teaching and the Jean and Alexander Heard libraries. 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)

