Transcript

[00:00] [background music]

Derek Bruff: [00:06] Welcome to "Leading Lines," a podcast from Vanderbilt University. I'm your host, Derek Bruff, Director of the Vanderbilt Center for Teaching.

[00:11] In this podcast, we explore creative, intentional and effective uses of technology to enhance student learning — uses that point the way to the future of educational technology in college and university settings.

[00:22] In this episode, we feature an interview with Enoch Hale, Director of Teaching and Learning Excellence at Virginia Commonwealth University. I've been impressed with the innovative work on educational technology of VCU for years now and Enoch has been a key player in many of those initiatives.

[00:38] He has a way of making clear the connection between a piece of technology and the kinds of student learning we might want to foster with that technology.

[00:45] We start the interview by talking about three technologies he's been experimenting with in his own teaching and in his faculty development work. One quick note. During the interview, I keep mispronouncing the name of one of the technologies. The tool is called Flipgrid with an I, not flipgrade with an A.

[01:01] [background music]

Derek: [01:06] Enoch, thanks for being on our podcast.

Enoch Hale: [01:10] Thank you.

Derek: [01:11] We're here at the POD Network Conference, POD Central -- Professional and

Organizational Development Network. I'm here because I'm a director of a teaching center and you're here because you're a director of a teaching center.

[01:20] This is our professional conference and I'm glad to have a little time to chat with you while we're here about educational technology.

Enoch: [01:31] Thank you. I'm honored. This is exciting.

Derek: [01:31] Let's start with something concrete. Can you describe a project or two that you've been involved with at Virginia Commonwealth that's used educational technology in interesting ways?

Enoch: [01:41] Let me give you just three quick snapshots. One is Flipgrid.

Derek: [01:48] Flipgrid. What is that?

Enoch: [01:51] Flipgrid is an online interface. I like it because students don't have to login. I also like it because I put out a prompt, a video prompt or a text prompt and then students, send them the link, they press the button and they have 90 seconds to record their reply.

[02:09] It puts it up on a grid, used according to when students log on. That's one technology that I've been using. How I'm using it is the interesting part.

[02:20] [laughter]

Enoch: [02:20] Before I get to that, another one is Timeline JS. One of my former colleagues introduced me to the Timeline JS design. It's free. It's designed to create history timelines. What I'm trying to do with it is have students use it to craft to the narrative of their intellectual growth over the course of the semester within a given discipline.

[02:45] It's an act of making the thinking visible, but using Timeline JS as their medium.

[02:52] The third one is, I'm running it this semester in the class that I teach, but also my professional work, playing around with Telescopic Text.

Derek: [03:13] What is that?

Enoch: [03:14] Telescopic Text is free, but the idea is that you start out with a platform, a statement that you can make. It's limited to, I think, 150 characters or something to that effect.

[03:17] You have to unpack a logic to it. What it is is it's an elaboration tool. You can highlight a particular word, and then type in your elaboration. What you see is just a highlighted word, but as soon as you click on that, it unpacks. It telescopes. You can go on and on and on and on.

[03:42] I think, once again, the excitement of that is how it's being used. [laughs]

Derek: [03:49] Three tools. All free, right?

Enoch: [03:52] Flipgrid, it costs $60 a year.

Derek: [03:55] The other two are free. You're using some in your own teaching, but then...

Enoch: [04:02] All in my own teaching.

Derek: [04:03] All in your own teaching.

Enoch: [04:03] And in faculty development. The Telescopic Text, we're just playing around with faculty right now, but I used the Flipgrid, for example, in our Learning Spaces Fellows Program. The idea was they needed to reflect on their experiences in this experimental classroom. Movable furniture, amazing technology...

Derek: [04:24] These are faculty who were teaching in active learning space classroom?

Enoch: [04:30] Yes, correct.

[04:30] When I got them together, the reflections were fine, but they had a hard time beyond that of just a loose, informal at times dialogue, like recording it. We have a WordPress site, rampages/spaces, acts as a mother blog to pull into their blogs.

[04:48] I give them prompts and they're to blog about that, but some of them aren't doing that. Some thrived in the blog environment, others it just seems too big of an investment, so I

use Flipgrid.

Derek: [05:02] Tell me more about Flipgrid. What does it look like? How does it work?

Enoch: [05:07] If I have my account, I create a grid. What that grid is, it's like one topic, let's just say. I have a grid called Learning Spaces. Within that I can have multiple questions. Each question represents one experience.

[05:24] I'll submit a question, and once again I like it because students don't have to log on, but it's similar to...not totally similar, but I'm thinking of VoiceThread.

[05:38] That interfaces in our LMS system. I like that, but students have to have a unique login and we're just working out the bumps there. I think as a comprehensive tool, VoiceThread is tremendous, but Flipgrid is great for capturing micro experiences.

[05:53] I've put out a prompt — I tend to like video prompts — and then students watch the prompt and they respond to my question. They have 90 seconds.

Derek: [06:04] Through video or audio or text?

Enoch: [06:06] It's all video.

[06:09] They can create an avatar if they want, but from their phone, their computer. That's the one requirement, is they have some type of digital tool.

[06:17] We do our best with students to make those available. The faculty really liked it because it's a pretty low investment in terms of time.

Derek: [06:24] If I'm on my phone, I'll just capture the video with my phone's camera, or if I'm at my laptop, I'll just use the webcam.

Enoch: [06:30] That's part of the fun. It's also part of the challenge because you're sitting there in the middle of student commons and you might get a lot of background noise. And other times, you'll have students at home, I had one student, a grad student, he was in his backyard and he used fire as a metaphor to capture his...

[06:45] [crosstalk]

[06:45] [laughter]

Derek: [06:48] They could shoot live on location, wherever they need to be.

Enoch: [06:51] I presented some of my initial findings with faculty, and also using Flipgrid at a conference at University of Tennessee this last year for their Learning Spaces Conference.

[07:02] I do think it's important to say that the way I'm trying to use technology in my own instruction and in faculty development isn't "here's an interesting tool." I like the metaphor of a tool. I think it's also kind of overused and often abused. I want to use technology that is generative.

[07:22] Meaning, I want it to be necessary in cultivating the insights or skills or dispositions that I want to emerge from the learning experience within that particular discipline or course. In other words, I want it to be like an insight generator.

[07:40] If I was to put this as a question, "Is the technology necessary for the insight that I want to emerge?" Now, in many cases, I think the tools aren't necessary. If they're not necessary, and I should say, I want to use the word necessary, that's what I look for, that's my criteria.

[08:03] Integral might be a better, more accurate term. If it's not integral to the learning experience, then oftentimes I have to ask as a faculty developer, how much investment do I have to put in to actually help faculty to see its merit?

[08:18] There's learning curves involved with some of these things.

Derek: [08:22] Something like Flipgrid?

Enoch: [08:23] Flipgrid.

Derek: [08:22] Right. Let's think about the learning spaces group that you've got. In what sense is that integral to the kinds of conversations you want to have with that group?

Enoch: [08:32] With faculty, it's pragmatic in a sense that it's solving a problem of capturing and reflections.

Derek: [08:39] You wanted to hear from everyone. You wanted them all to be reflective. When you got them together in the room together you would hear from some, but maybe not all.

Enoch: [08:48] There's also more of an organic conversation. It became more integral to the type of thinking we wanted to cultivate when number one, I said was what's the thinking direction? I'm putting thinking first. What's the insight that I want to emerge, or at least this skill I want them to practice.

[09:06] When I have faculty interfacing with Flipgrid, for example, I'm able to scaffold out a series of questions that provides them a concentrated lens. They have to think concisely. They're having to, actually, do quite a bit of forethought to...

Derek: [09:20] There's a time limit on the video?

Enoch: [09:23] Yeah. 90 seconds.

Derek: [09:24] 90 seconds, OK.

Enoch: [09:23] I'm talking about elaborating. I'm elaborating a lot. [laughs] Really. The art is being concise. Finally, crafting those experiences so that it encourages faculty to listen to others. I say faculty, but I mean students as well. For example, I'll put a Flipgrid out. I'll say, "All right."

[09:41] First question is, let's just say, "What was the insight that your students came to as a result of shifting their furniture?" Then I said, "Now, the first person to see this is going to answer that question, but then you're going to ask a question."

[09:55] The second person to log on is not only going to re-see my prompt, but has to listen to the first person to get their question.

Derek: [10:05] There's a chain in the effort.

Enoch: [10:08] There's a chain and it encourages students' listening to each other, faculty to

listening to each other. Faculty are much more interactive.

Derek: [10:15] If I'm the fourth, I don't have to listen to all three that preceded me, but I have to listen to the one that preceded me.

Enoch: [10:21] That's correct.

[10:22] What I found that with faculty -- of course a lot easier. People actually want to hear what others have to say. This is a very beneficial thing like VoiceThread where you can have text options. It's a much more inclusive technology as well. That way, students can see the chain of conversation.

[10:38] With Flipgrid, that's not its purpose. Its purpose is to capture individual reflections, but I want to use it also as an opportunity to encourage greater discussion that we can then transfer into the classroom or to continue the conversation in another modality.

Derek: [10:54] Just for clarity, you talked about using this with your own students, what types of questions might you have them address?

Enoch: [11:01] Content-based questions. One of the classes I teach is a graduate class on teaching, learning and technology and the future of higher education.

Derek: [11:09] Sounds like a great topic.

[11:11] [laughter]

Enoch: [11:11] I think so, yeah. We're talking about, "OK, let's just talk about digital engagement specifically in cultivating and crafting online discussions, and what is active listening look like in that environment?" I would put forth that question.

[11:25] I can identify specific lens and this is what I say. I can give a broad question or I can say something to the effect, "Identify two assumptions that the author made within this argument, and what are their implications for the broader discourse?"

Derek: [11:40] Flipgrid, you mentioned that there's this element of concession. You got 90 seconds and you've got...Now, you also talked about...What was your text expander tool?

Enoch: [11:51] Telescopic Text.

Derek: [11:52] Telescopic Text.

Enoch: [11:53] Yeah.

Derek: [11:53] It seems to work in the opposite direction.

Enoch: [11:55] It's an elaboration tool. Telescopic Text is fascinating because as I'm using it, I'm putting the thinking first. I think that's where technology becomes powerful and integral to the learning experience.

[12:07] It's like clickers or you're doing Poll Everywhere. When you can see yourself in relation, the data visualization is where that becomes something that is...

Derek: [12:17] I'm that bar graph. I'm that part of the bar graph.

Enoch: [12:20] Exactly. You're seeing yourself within it and that's what I'm looking for. Technology where people can see their thinking development within it, see themselves, their identity becomes part of the experience. Like Telescopic Text, the first objective is to take a reading, for example. In my case, I took my syllabus.

[12:40] [laughter]

Enoch: [12:40] What's the essential question that I want to ask that this course is always going to go back to, and so I boiled it down to that one question.

[12:49] The question for this particular course, an undergraduate course called Inquiry and the Craft of Argument, is "Do people make decisions about what to believe and do based on sound reasoning?" That's all that is written there.

Derek: [13:01] [laughs] It's a big question.

Enoch: [13:02] It's a big question.

Derek: [13:03] It's the essential question for your course.

Enoch: [13:05] That was a lot of intellectual work to distill all these questions that they're going to be thinking through. What is it all going back to? That's an insight from backwards design, for example. That's a tenant of a course design.

[13:19] That's one skill, is being to take an article, being able to take a lecture and condense it down to its essential question or elements, or I was saying claims.

[13:31] [crosstalk]

Enoch: [13:32] Exactly. Then they have to elaborate on that. They're having to then identify specific concepts that we're not going to take for granted, that we have a shared understanding, but they're going to unpack them. The skill there is being able...Elaboration is being able to make connections between related ideas in order to create a map of understanding of that particular concept.

Derek: [13:54] For your essential question, "Do people make decisions based on evidence?" you might take the word "evidence" and expand that?

Enoch: [14:02] Exactly. I say, "Do you?" instead of, "Do people?" I say, "Do you?" Another one idea is, for example, what the question as it started to unpack is "Do people make decisions, inferences, beliefs based upon sound well-reasoned, justified, and valid arguments rather than tradition group thinking way of persuasion?" Those were the unpacking.

[14:28] The next question came up, "Should we?" Now I highlighted "we" and you press "we," it says, "Is it important to do so?" Highlighted "so," "What are the consequences if we don't?"

[14:39] Highlighted "consequences" and "don't," but consequences says, "No, implications." The consequences are things that have actually happened. I wanted to shift that or highlighted implication.

Derek: [14:50] I'm reminded a little bit of a good Prezi, where you see the big picture, but then you zoom in on one piece and start to unpack that a little bit and you can zoom in again. It sounds like this is in some way, it's a text version of that as you...

[15:02] [crosstalk]

Enoch: [15:02] I even thought of it that way, but that's exactly right. That's why I like Prezi since that you can see the big picture at any time. The challenging part of Telescopic Text and why I love it so much is it's hard enough for students to find the essential claim or a question. It's also hard for them to be mindful of the concepts that need to be elaborated.

[15:25] To map that out so that the tool works is an amazingly difficult process because you're having to, in essence, lay out the logic so that if you unpack any word, whatever it is, the sentence still reads because you can mess it up. All of sudden, that's not doing what it needs to do.

[15:47] They actually have to create these logic maps on the whiteboards that show where they're going to unfold and then build it. This Telescopic Text, given those goals right now, is integral. When I build in a reflective metacognitive activity within it, it becomes a necessary condition for the type of thinking I want to cultivate.

Derek: [16:14] I'm thinking of my cryptography course that I teach where we look at questions of surveillance and security and privacy. There's a simple way to ask that question. Should the government be able to read all of our emails? Any little piece of that can get exploded in different ways.

Enoch: [16:32] Isn't it that what the essence of academia is about? It's being able to ask a question about some phenomenon [laughs] and think through its implications. It's seeing complexity. I'm trying to find tools that are seemingly simple -- Flipgrid, Telescopic Text -- and use them in extraordinary ways. Now I am an expert at it? No.

[16:57] [laughter]

Derek: [16:57] I think we have to try.

Enoch: [16:58] Am I trying?

[16:59] This is the part that I'm excited about, is that when I see a new tool, my initial consumption of it is, "Oh, here's a tool." But when I take the concept tool and set it aside and say, "Oh, how is it a generator? What's the thinking?"

Derek: [17:15] What thinking does it foster or help?

Enoch: [17:19] Or help me foster, yeah.

[17:22] Something happens in my own mind. I not only become excited, I begin to see and lay out my plan for growth. I did a survey of faculty. It's just an informal survey on my own institution saying, "All right, how many of you have a plan of development for your scholarship?" 98 percent have.

Derek: [17:44] Everyone's got a plan.

Enoch: [17:46] For your service, over 60 percent did. How about for your teaching? One. We're talking about over a hundred faculty that I…one.

Derek: [17:52] One has a plan for developing their teaching over time?

Enoch: [17:56] Yeah. I want to think, "Well, what's my plan for developing my own competencies." Not just knowledge. I think it parallels in part how students often see coursework as a one-way transactional input-output. I think the technology has a real power, if the thinking is put first to actually be a generator of insights.

Derek: [18:21] Let's move to your other example, Timeline JS. How are you using that with students?

Enoch: [18:26] This was an interesting…

Derek: [18:27] Interested in meta cognition happening here too, right?

Enoch: [18:28] Yeah. I asked myself, "OK, what is the one content insight? If nothing else happens, what's the one content insight I want to have them walk away with?" That's easy enough. I was like, "What's the insight that I want them to have about how they learn?" That requires tracking.

[18:46] Oftentimes, we track with journals. I don't want to read more.

[18:50] [laughter]

Derek: [18:50] You have enough to read.

Enoch: [18:52] I have enough to read and I don't want to read that.

[18:57] [laughter]

Enoch: [18:57] I'm trying to use technology as a way to condense, but also visualize the thinking, their narrative of intellectual growth.

[19:07] Here's the thing, is students don't necessarily — in my experience, I don't want to over generalize — but think about taking Bio 101 from the point of view, "All right. not what am I going to learn, but what am I going to learn about learning? Can I track my intellectual growth?"

[19:23] That's what I want to focus on because we have a lot of investment in general education. We have a lot of investment in the claim that there's transferable skills.

[19:31] Our insights, our dispositions. Timeline JS was an opportunity for me using a free tool for students to begin to craft a narrative over time. Timeline JS allows you to...so it's a timeline. For each marker, it allows you to put an artifact. Video — a student can make a video or find a video —

[19:53] A picture, a chart, a diagram, or a PDF copy of their paper. When they say, "Yeah, I have cultivated, become more skilled in asking questions of clarification that target an author's assumptions. I've done this in class. I also do it in my work and here's an example."

[20:15] "At the beginning of the term in my paper or this article, I didn't notice this, but at the end of the term, here's examples from my work." They just put PDF picture. That's been tremendous. I think, the secret though is less is more in that case.

[20:33] [laughter]

Enoch: [20:32] All the different intellectual moves and skills we work through targeting and focusing on, just a few really helps students see visually how often, just with asking clarifying questions, examples and definitions and elaborations...

[20:48] How often we do that work, but we don't necessarily do it mindfully and strategically. It becomes more implicit, we hope. [laughs] I question its consistency in application.

[21:00] When I can throw it out there, let alone more complex intellectual moves, but when I can put it out, I can really help students see like, "Look at the work you've done in here intellectually and how you've grown or not." [laughs]

Derek: [21:16] Do they build this timeline retrospectively? Do they add to it as they go during the semester?

Enoch: [21:21] We add to it as we go during the semester.

[21:24] At the end though, I want a comprehensive timeline. What I also like about all three of these tools is they can upload visually by virtue of the link, even Flipgrid, like an LMS, at least our LMS with Blackboard, or a WordPress site.

[21:40] I can put it up on my course sites and it's really exciting because then I can share it with faculty and say, "Well, yeah, you could say Timeline JS isn't something you really can do. I did it. My students do it. They're sophomores and yours are seniors."

[22:00] We have these amazing claims that, by virtue of going through this biology program, you can think like a biologist. It turns out we cater to the elite students.

[22:11] I believe that if we're going to live up to the ideals of what true liberal education can provide, then we have to have those meta cognitive components and the visualization. I learned, of course, a lot from your concept map. First, your note mapping exercise, and that's what it is -- making the thinking visible so that it can be a guide for development.

Derek: [22:34] I love that.

Enoch: [22:37] Those are three examples that I've been working on lately.

Derek: [22:41] It sounds like Flipgrid, you're kind of using the tool as the producer of the tool intended. It's called Flipgrid, right?

Enoch: [22:49] It's Flipgrid.

Derek: [22:50] Flipgrid.

Enoch: [22:50] Grid.

Derek: [22:50] I keep saying grade.

[22:52] [laughter]

Derek: [22:52] Flipgrid. That makes more sense. With the timeline tool, this is an off-label use, right?

Enoch: [22:58] Yeah.

Derek: [22:58] It's not what you think of as a timeline.

Enoch: [23:02] That's right.

Derek: [23:02] But the tool allows these types of interactions and creativity and documenting and you're using it for a very particular educational purpose.

Enoch: [23:13] You've seen other people, and I've done it myself, try to capture those student narratives of developments, from blog posts to something like Logster.

Derek: [23:20] Portfolio of some sort?

Enoch: [23:22] Portfolio, yeah. You could talk about e-Portfolios a lot. I'm trying to use technology -- one, free — [laughs]

Derek: [23:28] That helps.

Enoch: [23:29] in a way that expands my understanding of what's possible because those other tools are designed to do that. Therefore, they have limitations.

[23:38] Oftentimes, even if students are interfacing with those, if we just flip it, just nudge it a little bit with a tool that's on the fringes, not for that purpose...

Derek: [23:49] It wasn't designed for educational purposes.

Enoch: [23:51] it can really shake things up.

Derek: [23:54] The other thing I heard you say earlier is that this idea of experimentation and innovation. I think sometimes I hear from faculty this worry that, "Oh, I'm not going to adopt this tool or this practice if I can't see evidence that it works."

[24:06] In general, that's probably a good response. We don't want to just start doing stuff that doesn't make sense.

[24:11] But if there aren't some of us at least, who are willing to experiment with some new thing, and figure out what it can do and what it can't do and how it taps into student learning, we'll never know if a timeline tool could be used for this type of metacognition. Someone's got to kick the tires and see if that works.

Enoch: [24:29] Yeah, I agree completely. I also think there are certain technologies that faculty can see the immediate. They don't need evidence to say, "Oh, this overhead projector."

[24:41] [laughter]

Enoch: [24:42] "Oh, this document camera. Show me that thing is going to lead to the insights." No. Why? Because it translates immediately into their existing practice. It's just a way of augmenting it.

[24:54] The thinking though, if we put the thinking first, then I think we have many more opportunities to engage with things because people can use an overhead projector — although I haven't seen one for years —

[25:06] [laughter]

[25:06] They could use it superficially or they could use it in a way that's outside of the norm. It depends on how they're trying to get students to see and think.

[25:17] I think that, though, as far as faculty development goes, I don't care if it's a rubric or something like Telescopic Text, faculty have to see how it functions.

Derek: [25:30] What it looks like in practice?

Enoch: [25:33] Done well. Not just executed well, but cultivating the type of insights that

really mean something to them, that resonate with them.

Derek: [25:43] Our podcast is called Leading Lines. We're not trying to predict the future, necessarily, it's shape the future. As you think about where educational technology might go in the next two to three years, where would you like it to go? How would you like faculty to use it?

Enoch: [25:55] Personally, because of my orientation, I'm not an educational technologist. I'm an educator who's interested in multiple modalities by which to engage a thinker.

[26:10] I would love to see educational technology move in the direction that is seriously considering ways to help cultivate the habits of mind.

[26:20] Those dispositions of curiosity, integrity, perseverance, flexibility, playfulness. [laughs] There's so many that open-mindedness as a way to use tools that that's where the tool's intended to go. Other things are going to be involved, in terms of skills.

[26:41] If we can think about technology as a way to actually look at the world. I mean there are certain technologies that do that, but they're not necessarily dispositions that we want. For example, we Facebook. If you put Facebook on your phone, it's appealing. It's easy.

[26:58] It's remarkably egocentric at times. [laughs]

[27:01] Not necessarily always. What can we do to develop tools that get students to think about their thinking in a way that, "Yeah, I can evidence," or "This tool's actually a lens by which I can think more creatively." I know there's a lot of tools out there that help do that.

[27:23] If we put those type of thinking goals first, I think it might resonate a lot more with higher education. Another area I'm very interested in, Kaizena'd be an example of an LMS that allows for this, in part.

[27:37] What would technological resources look like if they're helping us cultivate the type of thinking that we'd like to see within the discipline? Timeline JS, thinking like a historian in part. Kaizena allows for you to put scientific equations within and build those. That's more of a discussion forum.

[28:02] What does it mean to think like a biologist or like a historian or a literary critic? How can we develop tools where the learning curve, that's not just augmenting, it becomes integral to the learning process? I'm curious. I think it's called Arizma.

[28:17] What they did is you could take your iPad and if you download the Arizma app, they have some preloaded things. Really, it's if you see...Mona Lisa. See the Mona Lisa and hold your iPad up and what you actually see is it move.

Derek: [28:37] Yeah?

Enoch: [28:38] It moves. You put it up to an empty wall because you picture a Mona Lisa, but then she begins talking, or she begins moving. I would love to see something like that. What would it look like if I went to a historical area? Richmond is full of...Lumpkin's Jail, for example. Slave quarters. Jailhouse for slaves.

[28:54] You could hold your iPad up there and see some type of rendering of here in this spot because when you're holding that up to the wall you see the wall, but that allows this image to emerge. God, that would be so mind blowing. [laughs]

[29:22] I think that part of the difficulty of thinking within discipline is not having a visceral reaction to what mitochondria [laughs] or mitosis, like being able to see that. Right now our main medium doing so is video.

[29:33] That's more accessible now, but I'd like to see Habits of Mind and disciplinary forms of thinking begin to emerge. I have my own other interest, too. Going back to that question, do people make decisions based on, to believe and do, on sound reasoning?

[29:49] I would love to see tools that really help the populous gain a greater confidence in what quality reasoning does for us.

[30:00] What that tool is? I don't know, I'm not that guy.

[30:05] [laughter]

Derek: [30:04] What I'm also hearing is some of these tools are going to be discipline specific.

Enoch: [30:09] And that's OK.

Derek: [30:12] And that's OK, but we might need folks who know the discipline well, who can help craft and shape what those tools look like. It's one thing to take WordPress, which is a generic blogging platform. You can do all kinds of things with WordPress.

[30:23] It's not tailored for one particular use. Whereas some of the tools that you are imagining are much more from the disciplines and would have to build disciplinary thinking into the tool itself in some really significant way. I think that's a big challenge actually.

Enoch: [30:38] I would agree. A possible workaround, you think about what does it mean to think like a biologist? There's broader intellectual moves at play. They're just contextualized around specific questions within the field.

[30:51] If we scale it up to think about what does it mean to look at something in nature and ask the question as a biologist would ask a question. You're not asking a theological question. You're not necessarily asking a mathematical question. You're asking a biological question.

[31:08] It's the act of asking a question within a particular lens.

[31:12] The tool might focus on asking questions and then give the user an opportunity to then contextualize that according to the theories and insights and knowledge that inform the discipline.

[31:25] Because all disciplines are based upon certain assumptions, are dealing with a network core set of questions and they have specific methodologies that help advance that. Those are transdisciplinary types of things. Maybe a workaround is focusing on the thinking and then allowing it to be contextualized.

Derek: [31:47] Most of what we talk about on this podcast is digital educational technology. What's one of your favorite analog educational technologies?

Enoch: [31:54] Whiteboard markers.

Derek: [31:58] [laughs] Yeah?

Enoch: [31:58] Whether it's a winked wall you write, [laughs] I love that.

Derek: [32:04] What kind of wall?

Enoch: [32:05] A wall. It's a paint. It's a whiteboard paint. It turns the wall into a whiteboard.

Derek: [32:11] The whole wall is a whiteboard?

Enoch: [32:14] Yeah, or movable whiteboards or whiteboards enough for all students to begin to map out their thinking with whiteboards.

[32:15] It's funny because a learning space is...one of our innovative classrooms has whiteboards, has multiple boards of projections, movable furniture. Consistently faculty say their favorite technology in the room is the whiteboard.

[32:28] [laughter]

Enoch: [32:28] You can talk to somebody in China. They're like, "Yeah, but I need to lay something out on the wall here."

[32:36] [laughter]

Derek: [32:36] Have students draw out whatever they're thinking, or share a problem with someone else.

Enoch: [32:41] Whiteboards.

Derek: [32:41] I like it. Thank you very much, Enoch.

[32:44] [background music]

Enoch: [32:44] Thank you, Derek.

Derek: [32:48] That was Enoch Hale, Director of Teacher and Learning Excellence of Virginia Commonwealth University. Enoch mentioned several really fascinating technologies.

[32:54] In the show-notes, you'll find some links to those technologies as well as more

information about Enoch and his work at VCU. You can find those show-notes in our website, leadinglinespod.com. We welcome your comments and questions there, and on Twitter where out handle is @leadinglinespod.

[33:09] If you have experimented with Flipgrid or Telescopic Text or Timeline JS, I would love to hear about your experiences either on our website or on Twitter.

[33:18] Leading Lines is produced by the Center for Teaching, the Vanderbilt Institute for Digital Learning, the Office of Scholarly Communications and the Associate Provost for Digital Learning.

[33:26] This episode was edited by Rhett McDaniel. Look for new episodes the first and third Monday of each month.

[33:31] I am your host, Derek Bruff. Thanks for listening.

[33:33] [music]