

Transcript

Derek Bruff: [0:00] This is leading life. I'm Derrick Bruff. Usually on this podcast we discuss educational technology that is both digital and kind of new. Today, however, we're leaning into the big tent approach we take by focusing on technology that is both analog and well, thousands of years old. In September 2021, I had the opportunity to visit the farminary at Princeton Theological Seminary in New Jersey. The former dairy as a working farm on the seminary campus that's integrated in the seminary curriculum. This fall, for instance, half a dozen courses met regularly at the farminary. Combining work on the farm with theological education. I was really impressed that the way, this very unusual learning environment supported very specific learning goals. And these courses. After I returned to Nashville, I set up a Zoom call to learn more. I talked with Nathan Stucky, director of the farminary project and Princeton Theological Seminary, and Emma Lietz former honorary fellow at the seminary. I'm excited to share our conversation here on the podcast. We talk about the origin of the farminary, the kinds of experiential and embodied learning that happens there, and the challenges and opportunities that come with teaching in rhythm with nature. Thank you, Nate, an image for being a leader lines. I'm glad to have you on the podcast today and learn a little bit more about the farminary. Before we do that though, I have a question I'd like to ask our guests. That's maybe it goes back in time a little bit. Can you each tell us about a time when you realized you wanted to be an educator?

Emma Lietz: [1:46] There are probably like a series of moments. But then when I think of first is I got a chance to work on this really cool farm in Western Michigan. And my job was to hang out with three young adults who were participating in this immersive fellowship program where they split their time between prayer work and study. I was kind of responsible for the study part, but the work we were doing was pretty integrated into the life of the farm. And I, that experience just led to the kind of farm conviction that education is just like the coolest thing in working with young people, is the coolest thing, especially in these kinds of

creative environments that are kind of outside the bounds of what we think of as traditional institutions. Yeah, young people are inspiring. So it is cool to hang out with them. **Derek:** [2:33] Yeah, I got that. **Nathan Stucky:** [2:35] So I think the story that comes to mind two things. One, when I was in sixth grade, my middle school band teacher said, I think you'd make a great music teacher. And I actually remember being offended by that. Thinking. I was like, I don't, I don't know if, if, if educators suffer from like, I mean, there's the whole thing, like those who can do those who can't teach. And I think I had already as a sixth grader, sort of drunk those waters. And so it was like, well, no, I must do something more important than be a teacher. And then I think for me it's been a long series of, of recognitions that like number 1, this is some of the most challenging, complex work that I could possibly imagine. It's, and it's profoundly rewarding to be able to, to be with people on the journey. And so I'm much more comfortable identifying as a lifelong student and co-learners than that even now perhaps. But, yeah, so it's been a long slow progression, but I do think I've recovered from or I'm still recovering from that sixth grade.

Derek: [3:43] Yeah. Yeah. Well, thank you for that. Yeah. I appreciate you pointing out what a challenging and complex task it is to teach and to learn with others. I think for me, I'm a mathematician by training. And I was drawn to the clarity and precision and accuracy of mathematics where there are kind of right answers to everything. And then once I experienced that for a while, I decided that the messiness of humans are a lot more interesting actually. And trying to kind of create these environments where people can learn effectively is, is really challenging and complex. So let's talk about the environment of the farminary I had the chance to visit back in September. And I have to admit I probably didn't really understand what the farmer dairy was all about until I thought with my own eyes. And we can't do that for our podcast listeners. But let's try to paint a picture. Maybe if, if I were to visit the farm unary, say this week, who and what would I see there? **Nathan:** [4:41] Well, the pulmonary is less populated now than then. It wouldn't have been a couple of months ago when we were in warmer weather. So it's early December now winter is setting in or we're getting closer. So now you would need drive in and you would see that coming down the driveway, there's a big green shed on the left and you keep going. And then there's kind of a tall cinder block, white garage structure, and then a long white cinder block barn That's probably 65 or 70 feet long and maybe 30 or 40 feet wide. And inside that barn there's lots of shovels and rakes and wheelbarrows and a tractor, and a walk behind tractor. And then a classroom space with a white board on the wall. And then if you kept driving past that or walk past that, you get out to our garden primary garden space where it's about a half an

acre. And we still have a few things growing out there. Some kale and cabbage and phenol and collars and spinach and a handful of other things. There's a pond out there, the whole properties about 21 acres and it's largely covered in evergreens from a former life of the farm when it was a tree farm. And amaz out there pretty regularly taking care of things. Oh, and you will also find about 70 hands, maybe 65 or 70 hands can choose guard geese that are now positioned close to the barn as a safe winter home. So that's what you'd find. Now that that maybe says very little about what had been an answers your question.

Derek: [6:16] Yeah. Yeah. Well told me he took me back a couple of months then in September say when I was there, talk to maybe a little bit about who would be there and what they would be doing in that space.

Nathan: [6:26] Sure. Emma, you want to hang around with them. **Emma: [6:29]** Sure. So, this past semester, we had more classes out at the farm and airy than ever before. In part of that is the legacy of our COVID adaptations which made the farm unary a lot more appealing, a classroom space. So, the farm unary is a farm and it is also a classroom space. And the way that the farm unary courses come about is primarily at the volition of the instructor who will design their course in conversation with the land there. So, depending on their discipline, those courses take a number of shapes. This past semester we had courses that were investigating theologies of order and chaos and queer hermeneutics and queer ecologies and ecology and faith formation and the landscape of ancient Israel. And one more that I'm forgetting at this moment. But the way that these courses are typically set up is, you know, it's like your traditional course with the syllabus and all of that in a lecture. But then kind of folded into that course requirement is an opportunity to get your hands dirty and work on the farm. And so, what that space provides is for students to kind of test their theological theories in the practice of farming. And also, to get to know one another in a different way and to relate to one another into the space that they cohabit as not just minds but bodies. And so, I think there's a lot of interesting insights that come out of that process for folks. **Nathan: [8:00]** Perhaps we should clarify since I don't know if we've named that explicitly yet that the farm unary is a project at Princeton Theological Seminary. So it's integrated kind of specifically into this theological endeavor or the endeavor of theological education. So, so, you know, the courses are, our flavored colored predisposed IS towards that specific vein of higher education.

Derek: [8:25] And maybe you could say a little bit more about that and kind of who the students are. Because I think some people may have misconceptions about what happens at a Theological Seminary. But who are your students and what kind of careers are they? Are

they are, why are they there? Right? **Nathan: [8:37]** Yeah, right. So, you know, historically, seminaries are places of preparation, graduate school in preparation for ministry, which again, historically traditionally would have been graduates going to serve as pastors in congregations is less and less the case as, as time goes by and as Christianity changes in the United States and as mainline denominations evolve. So now we have students. We still have a good percentage of students more or less on that track. We have more and more students who are interested in work in non-profit sectors, community organizing. We have students who go from here on to other graduate schools, med school, law school, different entrepreneurial kind of stuff, social innovation, those kinds of things. And, or, OR, or teaching. Obviously, a strong academic dimension to Princeton's, Princeton's DNA. So it's a, it's an interesting smattering of students. We do get an average students who come right out of undergrad. But then also number of second, third career students. And that mixture of students is, is always delightful and creates opportunities for interesting conversation and, and cross-pollination. So, the fact that I now serve as director of the farm unary, I was a student at the seminary for eight years. Didn't see that coming. But it's kind of a snapshot of theological education is leading into innovative, unexpected kind of spaces with greater and greater frequency. And Emma as well. You know, her background is, is a couple of graduate degrees from Duke in environmental management and in theology. And now she's at the farm unary. And so, you know, that's a snapshot anyway. Yeah. **Derek: [10:23]** So I wanted to circle back to Emma and in a minute and how she got to the farm an area. But let's do a little bit more of the secret origin of the farm unary. I've, I've been to other campuses where there are unusual learning environments that have been created. And I find that often they struggled to connect with the curriculum. But I gather the farm unary actually came out of the curriculum at Princeton. Can you, can you tell us that secret origin? How did, how did the farming area come to be?

Nathan: [10:50] It is a, so secret story so or not so sacred. So, it's the origin of the farm unary and kind of my story are intimately interconnected. I grew up on a farm in South Central Kansas. Born and raised in now ordained Mennonite and went to undergrad. And then after undergrad in Kansas, moved to the eastern shore of Maryland where I served churches for about a half dozen years and back to Kansas and farmed for a couple of years. That became this time at the tenth's vocational discernment, I end up back east in prison as a student at Princeton Seminary and thought I would just get a master's degree and ended up at PhD work. And in the midst of that, my early in the master's program, there was another student who found out I had been farming before I came to seminary. And he pulled me aside and

said, hey, I have this wild idea. I think we should integrate fully accredited theological education, which is what a seminary typically does with small-scale sustainable agriculture. And I thought, well, that's, that's a very interesting idea. But at the time it was well beyond my own kind of vocational or theological imagination. But it was the seed of the idea that, that eventually over years of conversation with friends and colleagues and professors, slowly grew. And then I was in the PhD program. A mentor of mine challenged me to take the idea seriously and kind of walked along side me and was able to kind of show me the way as far as things I could do to help the idea grow. And when that was happening, I mean, I was deeply skeptical from the beginning that anything could ever really become this. It was just fun conversation. But then it slowly gained traction. And there was this moment where the Princeton Seminary administration had heard about the idea. They weren't really sure what to do with it. We continue to work on it. And then I receive an invitation to go meet with seminaries president and I walked into his office and there's a property survey unroll across his desk. And he looks at me and gestures at this survey and says, so it turns out we already own a farm. Will this work? And I said, I don't know, we've got to go look. And so, we end up exploring this when, when, when the seminary realized they had sperm unary idea. And oh, by the way, we already on a farm, then that change the conversation pretty substantially. And so, then a committee was formed. That committee took a year to do like an assessment of viability. What would the mission be and how it connects to the broader mission of the seminary? How would we pay for all these kinds of things? And then fast forward to the spring of 2015, I defend my dissertation. We graduate in the midst of that, the seminary decides to go for it. But, but to your question about sort of the, the curricular roots, the sort of mission of it. My doctoral work is in the field of practical theology and in the sub-discipline of education on formation. And so, there was really never any question that the mission of the farm and airy within Princeton Seminary. Was for the education and formation of leaders for service in the church and in the world. So, I think that's actually been very helpful to be pretty clear about that from the very beginning. And so, from, from day one, part of my job has been to be a student of my faculty colleagues, research and teaching agendas. What are they currently teaching or researching? And where does that body of research in some way reach out toward the farm in some substantive way. And so, for example, one of our Old Testament professors right now, a woman named Elaine James. Her doctoral work and her first publication was all about landscape and the Old Testament. Well, conveniently right hand. So, yeah, so that was an obvious like, hey, Elaine, she was excited about the formulary when she first came to start teaching here a few years ago. And so then actually the spring of 2020, she taught Alex Pharm course on landscape ecology and the Old

Testament. And so, it wasn't me like trying to impose something on faculty colleagues. It was to say, if you're willing to pull the ecological thread, it goes in 1000 different directions. And so that's, that's one example of somebody who's already doing work there, reaches out that way. And so that course takes on a life of its own at the farm that, that it couldn't take on if it was just taking place in a traditional classroom, lecture hall, seminar room. So, so one of the, the sort of guiding principles here is what happens when we allow the land, the space, that built environment to actively participate and to be aware if it's active participation in, in the educational process. **Derek: [15:33]** And I wanted to circle back to that too, because I think that's, this is one of the things that I love to explore. When thinking about teaching with technology. What are the ways that the technology allows learning to happen that is either difficult or impossible to foster and other environments, sometimes technology just increases our efficiency at doing things we're already doing. But sometimes it allows us to do very different things. But I wanted to circle back to Emma. How did you come to the farminary? **Emma: [16:00]** Well, the short answer is, I found a job application to work at the farminary as the first farm unary fellow? The longer answer is that I was looking for opportunities to do kind of exactly this work actually. So, coming out of my own educational experience, most recent that you yourself variances. Just kind of trying to do to think that once both study agriculture and agricultural policy and environmental economics. But then also try to speak these things, these problems in some kind of theological language. So doing some work in the Divinity School at the same time. And for the most part, I found these two pursuits to be somewhat in conflict with one another. Always having to kind of explain myself and what I was doing to one party or the other. A good learning exercise for sure. But the farm unary kind of gets that relationship or at least it's trying to, it, it sees those thing as worthy. Conversation partner is actually, and you know, the theology has a kind of sad history of wanting to maybe separate itself from the land and from maybe like the work of our hands that supports even the ability to do theological work. But increasingly that's starting to become seen as kind of unviable. So, the more we can kind of integrate physicality, add the work of the LEA and the more than human community that feed this into the intellectual work that we do, I think the better it will be before it. And so that's kind of the yeah, that's the one I'm working on. I guess. So. Practically speaking, trying to kind of figure out how churches can be in better conversation with the land that they own and kind of pull that into their, their religious practice, whatever shape it takes.

Derek: [17:47] So, I think you answered this, but I'm going to ask it again just to be sure. So what does a farminary fellow do? Currently, I'm doing a couple of things. **Emily: [17:55]** I'm

crop planning for next season. I'm also writing papers and longer things. I work with students. I help assist classes that are taught at the farm and try to just get people out to the farm, mostly through workshops and events of that nature. **Nathan: [18:16]** Yes, sir. As we were putting together the job descriptions for the farmer, the farmer fellow, more or less. To be a reflection of the farmer dairy identity. So, it's, it's, it's trying to be this integration between the higher education, theological education piece and the tangible time in the soil and encouraging others toward that as well. So, the way the job description reads, though, we don't always, you know, job descriptions in reality, sometimes part ways, event. It's, it's roughly half and half, right? Uh, kind of, uh, research, writing, teaching, peace, and a farming piece. **Derek: [18:53]** Yeah. Well, it sounds like it's, it's not just like I'm here at Vanderbilt and we do not have a farm on our campus to my knowledge. We do have people who do climate and environment studies, right? And so, and I know they travel, and they are actually, you know, in in real places occasionally. But I feel like, like it's not just the study of that, right? It's the doing of, as well as the actual work of a farm. And so, let's talk a little bit about the student learning. Like what kinds of student learning can happen at the farm unary, that might be really hard to do elsewhere where you don't have this blend and this kind of embodied experience happening at the same time.

Nathan: [19:34] Yeah. Well, I mean, it's interesting that your name, you know, your, your colleagues, your Amsterdam, very important to work on climate and environment and whatnot. And, and how our built environment, our physical spaces or campuses, actively influence the contours of that work. And so I think, you know, Derek, that on the evening of September first, the remnants of hurricane Aida came through New Jersey and in the pulmonary was, was clobbered by this. And we thought floodwaters higher than we've seen them in a decade. We lost a lot of livestock; we lost a lot of produce. It was I was devastating. And so, that experience landed in a heavy way, certainly for Emma and I, but also for the students who have been at the farm. And the more time and attention they have given to that space, the more that experience impacted them. And so there's a way in which, for me anyway, the farminary at its best is, is, is not only working towards this integration of say, mind and body, but also really trying to pay attention to the role of an effect and the feeling of education and how important that is. So, so my, I hope, and I think we have reason to believe that our students who are trying to think about many things and including questions about climate and climate justice and climate action plans and these kinds of things. That, that feeling of loss and, and heartbreak following the actual devastation of an actual climate event on this boy of land where we have worked and cared for and for

each other. That provides a motivation for ongoing action and care in that domain in a way that I, that, that is particular to that. And, and I always try to be very careful about not wanting to just throw shade at any other form of engagement. But for where we are, that affective emotional engagement is actually really important. I'm, I'm inspired by Stephen Jay Gould was evolutionary biologist at Harvard and he said once, that will never fight to save that which we do not love. And so, so that, that's hopefully one of the things that our students are experiencing is an affection for that place. Which then creates the possibility that they may also grieve when things are lost or broken or washed away. And then that motivates an intellectual pursuit, a form of engagement, and hopefully a sense of vocation that is not all inclusive of a whole person, but like refuses to draw clean boundaries around the identity of a person. Even to say no, there's this deep interconnection between us and the more than human members of our communities. Whether it's this desk where I sit with the soil where I stand, or the food that I consume to bring the life or my microbiome, all the bacteria and whatnot within my gut that help me digest food and live on. So hopefully we're gesturing that the big vision, but hopefully we're gesturing towards that and the kinds of educational formational experiences that are happening. As we let this 21-acre farm.

Emma: [23:10] I think the thing I'd like to add, if I may, is I always find it interesting. The way that the land speaks directly to students. There's actually very little, I think, work that we as educators need to do to create a learning experience that is deeply impactful for students. Outperform. The land itself has a message to convey. And it's almost as if the hierarchies that are built into the classroom structure kind of, they're suspended for a little bit. Not to say that the work of a farmer isn't skills or a profession and of itself. But students, they get to come and see and have kind of direct access to this primary text. You know, in a way that maybe in the classroom, they feel like that access is mediated by professionals and scholars and things like that. So, I always find that people bring really valuable and interesting insights just by the very nature of them being in that space and noticing things that maybe I wouldn't have noticed on my own. And having more eyes on that small half acre. And it's really, really cool icons from it. **Derek:** [24:11] Can you say a little bit about how this might play out in different courses because I imagine, I mean, you mentioned a few different courses that we're running at the farminary this fall. And they, they have different, you know, to put my C, a center for teaching had on, right? They had different learning objectives. They had different syllabi that different, different content and different kind of skills that they were developing. What were some of the connections that

you've seen come out between the work on the farm and in particular courses that we're trying to foster certain kinds of conversations.

Nathan: [24:40] Yeah. So, an example that comes to mind. The course that I was teaching this semester out there, what's called ecologies of faith formation. And so kind of a guiding question for that course is what kind of ecosystem health states grow? And so students or you are reading the literature in human development and faith development. And they're doing autobiographical work in conversation with these developmental theories. And, you know, all of these developmental theories at some level are trying to make an account for a variety of factors that contribute to the growth and development of a human. And I think that, you know, to, to, to have that conversation, to be engaged with that literature, but then to be carrying for the farm. And in particular this semester in this sort of post Bolivia. And if I, if I may, after the flood kind of context. It was powerful insofar as every theory has its limits. And, and, and it can never account for everything. And so, so like there was, there was, there couldn't really be necessarily, would be difficult to imagine a theory of farm development that would account for all of the unexpected things that happen. So, I think one of the, one of the ways that the farm contributed to some of the conversations of the formation that happened in this course was, it was just this tangible representation of, of all life is kind of subject to a countless number of influences. Relationships and some things that are somewhat predictable and some things that are completely unpredictable. And some things that happen in a way that seemed to really promote flourishing. And sometimes in ways that, that can kind of short or lead to premature deaths or however you want to think about it. So, in a course like that, that's, that's very much focused on faith formation and kind of a life-cycle. The farms like the living lab, where, where you can see these things not only for human creatures but for all kinds of other features as well. And I think we can, we can, we can watch students kind of making connections and recognizing in particular interconnectedness of all reality. And also like both the power and possibility of a good theory and also the necessary limitations. Mm-hm. **Derek: [27:10]** Yeah. Yeah. How about you and do you have a story from a course you can share?

Emma: [27:15] Yeah. Well, the queer hermaphrodites' course that was taught at the farm that was new for us this year. So, it was really interesting to see where the overlap was. That was one of the courses, but maybe you had to reach a little bit further to find the interplay, but You know, I think there's this kind of sense in which agriculture can be read in light of a certain like biological determinism. If you want to call it something like that. You know, like

there is a way that things like must be. There's like a natural way in which the world was created. And it's very like gender and gender are serves the purpose of reproduction in this very kind of straightforward kind of way. But it was interesting to kind of walk through to farm together and locate the places where sex and gender with a little bit more fluid. So, if you'll recall, plants to have different sexualities themselves in different modes of sexual reproduction. And so I was able to kind of teach the students a little bit of white basic plant physiology, biology. See, I'm no expert. But yeah, I mean, and the compost pile too is kind of like an infinitely generative for, for theory and practice. Kind of place where identities sort of converge and merge with one another. One kind of question that came out of our order and chaos class this semester was, um, is the compost pile like a hostile environment? Like are the many microbes who inhabit that place? Are they antagonistic toward one another? I mean, they, they do consume each other. But at the same time, the compost pile seems to possess a certain logic of its own. But in some ways it's very ordered and very pro life. So I mean, no, no clear cut answers there, but good and better questions. I think.

Derek: [29:08] So. I have to just share. So in years past on the podcast, when we were talking about digital educational technologies, we would often in every interview by asking, I guess, what's your favorite analog educational technology? And, and I know for a fact, no one has ever said compost pile. **Nathan: [29:28]** We might vote for the compost. **Derek: [29:31]** I love that. I love that. I mean, there's a lot happening there, right? Like that's why it exists. **Nathan: [29:38]** Well that I think, you know, I guess we could go into a lot of different directions here. But a lot of the formation that, that happens in that space is relative to our current ecological situation. And so questions of waste are, can be pervasive and, and how, you know, if, if restorative predisposed to categorize the world according to something that is worthy and valuable of maintaining possession versus discard, then that can color kind of everything. And whatever compost pile is suggesting that the possibility that maybe weigh less his waist band, we think because the thing that we may be predisposed to categorize this waste can actually be the food for this amazing sort of microcosm was in the compost pile. And I mean, you can just imagine all kinds of ecological, ethical, religious kind of reflection can issue from that. **Derek: [30:39]** Yeah. So my day job at the center for teaching and advising faculty and helping them think through all the various teaching choices that they have. What is, what, what do faculty find challenging about teaching at the farminary?

Emma: [30:51] I have a quick thought. And that is that sometimes the unpredictability of the

weather or the, the work struggles to fit neatly within the confines of this set syllabus. So I think, if anything, the challenge, I want to call it infestation but is to adapt I guess to the, to the ribbons out there and look for those teaching opportunities as they emerge. **Nathan:** [31:15] Yeah, And I, and I think like so. And that points to the ways that, you know, there have been certain rationale and logics behind why education evolved to a point where we kind of like a classroom where we can control the temperature and, and how various other technologies. And, and, you know, so a lot, but a lot of that then can, can feed this myths of controls to, to, to various degrees. And so I, I'm with Emma that it does present this challenge and it presents this opportunity for us to be asking questions about how much control do we actually have? And, and what are the consequences of our our infatuation with control? Or do we have, or what does a healthy relationship with the control of any environment look like? And, and there again, you know, all kinds of space for reflection on the implications of those kinds of questions. **Derek:** [32:17] Yeah. Well, what's next for the farminary? That isn't intentionally broadly phrased question.

Nathan: [32:26] Emma already mentioned she's working on the seed calendar, the planting calendar for 2020 to this, this flood event from this fall really impacts how we're thinking about the farm as a whole. It and end is pressing our own need for kind of an agricultural master plan that we have. We have 21 acres, give or take. We actively manage, maybe just four or five of those acres. A lot of it is grown up in trees from the old tree farm days. And right now the garden sits in the floodplain. And maybe that doesn't make a lot of sense. And yet be, you know, kind of put ourselves into that space and to building the soil in that space. And so, so, yeah, so lots of interesting long-term questions about what the farm wants to become agriculturally. This whole, we integrated the farm with dining course that got really hampered because of the flood, but that, that integration continues. So thinking through that and then just continuing this trajectory of encouraging more and more faculty to be out there, more and more students to be out there. Broader members of the community to be out there. And, and thinking about what's the kind of programming that, that draws people out there and helps them engage with the space M. And I have had a lot of really interesting recent conversations about what it means to teach the hard skills of farming, of agriculture to our community. And we've, Emma has, has, has been insistent on, are reflecting on, on people's tendency to want to metaphor rise the farm and, and, and what's at stake and whether we're doing that or not. And so so yeah, I mean, what's next for the farminary is, I think just like All the reflection and practice and struggle and joy and mass and beauty of education in that space. And end to do so in a way that is willing very

intentionally to say the humans aren't the only actors in this space. And then, and then what that opens up for us. So, so yeah, we've got all kinds of plans about some extra learning space out there, about having a teaching kitchen out there, about having some residences for students out there. As we look farther down the road and am excited about that. Hopefully a greenhouse you up this winter. We'll see.

Derek: [34:46] Lots to do. Emma, is there anything else you want to share about your experiences at the farm? **Emma:** [34:53] Yeah. I mean, your question, LAN technology. We're just kind of prompting me to consider the unique relationship to technology. I think that pipe happens kind of on a farm at our scale. And the ways that like it's constantly being negotiated, like the costs of the technology is implementation versus the benefit. Then even I hear these questions kind of echoed in some of our plans for how to build out the space and the teacher and the master planning process. Like how do you, how do you scale up and how do you like, introduce change and ways that stay true to kind of the character and ethos in this space. That's not always a straightforward answer. **Derek:** [35:31] Yeah, because new technology comes at, I mean, sometimes it's a financial cost, it's often also a cost and time and effort and attention. And so you have to decide is this is what we're going to get out of this new technology worth the investment that we have to put in to make it work and to learn how to use it. I can imagine that you face similar, similar questions. **Emma:** [35:52] Practically speaking. Our conversation we're having is, I'm like around till age implements and plastic, the use of plastic on the farm, That's a big one. And organic agriculture, the labor saving benefits versus the kind of ethical questions that are behind them. **Derek:** [36:12] Yeah, I know. I'll take it back to the statistics class. Fury, my, my math colleagues will debate whether or not students like what access to calculators should students have in a math classroom, right? What's valuable to do with your hands, right? And what's valuable to have a machine do. And I can imagine you've, you've got like you, you could have a vastly more efficient farm. I'm imagining, but no role for students there. And that's, that's not, that's not the goal, right?

Emma: [36:39] Exactly. Compost it's much more effective breast and turn it with a tractor, but that's a one-person job. **Derek:** [36:46] Right? Right. Well, thank you both for coming on the plant gas and sharing your experiences and telling us about the farm. I was just fascinated when I was there at this, this blend of the kind of the built environment, the farm environment, the technology and how it was, it was, it was informing the learning that was happening in such really tangible ways. And so I hope our listeners have gotten a little

sense of that today. And I just want to thank you both for coming on. **Nathan: [37:11]** Thanks for having us.

Derek: [37:15] That was Nathan Stucky, director of the farminary project at Princeton Theological Seminary. And Emma Leitz bulky farminary fellow at PTS. Thanks to both of them for taking the time to talk with me about the farminary. I've been thinking about Emma's comment that she expected more questions for me about technology, it made me realize I had been thinking a little abstractly about the farminary as a technology. In my book, intentional tech, I offer seven different principles to guide the use of educational technology in teaching and learning. And sorry, I went back to that list of principles to consider which one's applied to the farminary experience. The one that seems to fit the best is what I call times for telling a term coined by Schwartz and Bransford back in the nineties. This is the idea of giving students a hard problem or challenging experience that can help them get ready for learning. As the students in a farminary course are working on the farm, they are having a shared agrarian experience, one that motivates and informs the conversations they have about theology and vocation. The conversations would be poorer without that shared experience. And the shared experience isn't possible without the technology found at the farminary like that compost pile. You may not have a working farm at your institutions, but you can still use technology to create these kinds of experiences for students. In fact, we've explored this idea several times on leading lines, particularly the use of games and simulations to create times for telling. I'll put links to a few past episodes in the show notes for those who would like to explore this idea. Leading lines is produced by the Vanderbilt Center for Teaching and the gene and Alexander heard libraries. You can find us on Twitter at leading lines pod and on the web at leading lines Pod.com. This episode was edited by Red McDaniel. Look for new episodes the first, third Monday of each month. I'm your host, Derek. Thanks for listening.