TOPcast Episode #192:
Futures Thinking and Digital Higher Ed

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(*Musical Intro*)

Kelvin Thompson: From The University of Louisville's Delphi Center for Teaching and Learning…

Tom Cavanagh: And The University of Central Florida's Center for Distributed Learning…

Kelvin: I'm Kelvin Thompson.

Tom: And I'm Tom Cavanagh.

Kelvin: You are listening to the final 15 episodes of TOPcast, the Teaching Online Podcast.

Tom: They are, but as we like to say, the final 15 scheduled episodes, because they may not be that rid of us that quickly, that easily. We may pop into the feed on occasion when we wish to opine on something that is happening or that we want to share. Stay subscribed.

Kelvin: Stay subscribed, and we'll get T-shirts to say that "Stay Subscribed."

Tom: [Chuckles] That's right. That's right. So, I saw you sipping. What is in the thermos?

Kelvin: No thermos. I went out to a place that I've heard about for most of my time here, I never have ventured out. I went down the street in the area near the university referred to as "Old Louisville," which is the largest contiguous set of Victorian architecture in the United States, "contiguous" being the key word. This coffee is from the Old Louisville Coffee Co-op, which is in a Victorian brownstone structure of some sort.

I went in, and this is their coffee of the day. I've kind of journeyed through this very historical Victorian brownstone multi-block area. I went into this old building, and I had a nice conversation with one of the… It's a co-op, so one of the co-owner baristas, who said that the building of course goes way, way, way back hundreds of years, but it used to be an Italian restaurant. Then during COVID, it shut down, and it was vacant, and they had this genius idea of they got the place in '21, and opened it in '22.

So, it's relatively new future, new purpose, new pathway after a historical glance back. I was happy to know a little about it. The coffee's pretty good. Had a muffin to go with it; he upsold me. The money was going in his pocket, because he's a co-owner. I was happy to help. In there somewhere, Tom, is a connection to today's topic.

Tom: Oh, I think I got it, Kelvin. Egads, me thinks I have it.

Kelvin: [Laughs]

Tom: Yeah. Speaking of Victorian expressions, there's something having to do with being in a space that is in the past or from the past, but also with a fresh new perspective, and looking towards what's coming in the future. Am I on the path there?

Kelvin: You are there.

Tom: All right.

Kelvin: You are walking the path. That is, Tom, because you recently interviewed our colleague, Dr. Bryan Alexander. Dr. Alexander is, no doubt a number of listeners are aware, is an award-winning internationally known futurist, researcher, writer, speaker, consultant, and teacher working in the field of higher education's future. For many years, Bryan held a number of different roles at NITLE, the National Institute for Technology and Liberal Education, and he's taught at multiple institutions.

Dr. Bryan Alexander currently serves as senior scholar in Georgetown University's Learning Design and Technology Program. Tom, you probably don't know this, but I often think of Bryan Alexander as like my astral twin, my doppelganger, as you might say. You know why that is?

Tom: It's not because you two look alike.

Kelvin: No, no. He's got much more facial hair than I do. Much more. Now, we were born on exactly the same day and exactly the same year, and yet our paths have crossed a number of times through the years. I always kind of get a kick out of that. Then

Bryan actually studied doppelgangers in his PhD dissertation work. [Chuckles] So, I get a kick out of all of that all the time.

Tom: Oh, that's cool. I didn't know that. What a fun bit of trivia.

Kelvin: There you go.

Tom: Yeah. Wow. Well, happy birthday to you both at some point, depending upon when you're listening to this.

Kelvin: Some point. That's right. That's right. Anything you want to say about this?

Tom: I don't really have a lot to say. I think it stands on its own, just to say that I always enjoy the opportunity to talk to Bryan whenever, usually we cross paths at conferences, and things, and dinners. A very thoughtful guy, and I really value his perspective on the space, especially from the perch he sits on. Feel really fortunate to have him here on TOPcast.

Kelvin: Yeah, maybe we'll note this, this is not a bad entree into, we'll say more about it later, but we're going to soon have a little brief miniseries that we'll carry out in a few months of the fall season as we're heading down the home stretch. Starting in September, the next three Top of the Month episodes will feature a mini panel of community members speaking with us about key topics that are structural pillars in our online and digital education work.

We're thinking of these as pillar panel efforts, and they may resonate a bit with Bryan's anticipation of possible futures, or they might not. So, stay tuned. I think this is like a warm-up act for those conversations to follow.

Tom: Yeah, that's a great tease and a great connection to this interview.

Kelvin: Well, Tom, through the modern technological marvel that is podcast time travel, here is your interview with Dr. Bryan Alexander.

(*Musical Transition*)

Tom: Bryan, thank you so much for being on TOPcast. We really appreciate it. Well,

Bryan Alexander: Thank you. As someone who's listened to TOPcast for years, it's a lot of fun to be here.

Tom: Cool. Well, we thought you would probably be one of the more appropriate perfect people to join us as we're saying, sprint to the finish line. We are sort of in a reflective mood, looking back on 10 years of recording this podcast. So, I thought maybe the first question I'd start with is looking back over that decade, what do you see as the biggest changes in the ed tech space?

How far have we come in certain areas, and what do you think the biggest or most significant change is? You can kind of define that however you feel is best.

Bryan: Yeah. I think one is simply the mainstreaming and expansion of online learning. We tend to look back at the pandemic as this extraordinary event, which in many ways, it was, but that pushed us into online learning in a hurry, but there was already decades of growth. After the pandemic ended, we still have huge amounts of online classes, and it takes multiple forms.

Community colleges doing certain classes, we've got mostly online institutions, like Southern New Hampshire, but the numbers are now extraordinary, just how many students are taking so many classes online. Some of them are a mix. Students will take classes face-to-face at one campus, and then take some online as well. As someone who's worked in this field since the early 1990s, this is just the outcome of a long, long trend line. That's one.

I would say a second is the just steady growth of open, and by that, I mean primarily open access and scholarly publication, as well as open education resources. Nothing really shocking has happened. There hasn't been any sudden spike or fantastic invention. We've just seen steady growth, and it looks like OER is just a major player in the field of classroom and learning materials. Open access just continues to be large.

Both of these are controversial. Open access, there's a lot of churn around this and some spectacular failures, but it's clearly significant if you look at projects like Archive. OER just continues to grow. I think that's a second development that I find very pretty important. I guess a third is, again, maybe this is in the spirit of continued development, which is there's been criticism of educational technology within higher education since the beginning.

Some people say that "Oh, no, no, we've been living in hype." There's been opposition every day from within higher education, all kinds of ways. That criticism has deepened over the past decade. There've been some major writers in that field, and I think we've seen some faculty and staff being able to take positions authorized by that critique. So, I think that's another development that's really large. Yeah, there's been a lot of marginal work on different fields, but I want to save those for what's coming next.

Tom: Yeah, it's interesting, that last comment of yours about the resistance, and it's not something I thought a lot about because I happen to work at an institution that feels like we lean into it in many ways, but you're not wrong, because it's almost, I think, perhaps a result of the success of online learning, that we're seeing this sort of almost equal and opposite reaction of resistance.

I know Phil Hill's written a lot about Arnold Ventures and others that have had an agenda that maybe they question a lot of what's going on in online learning. That

is interesting. It sort of leads to my next question, which is, okay, we just looked backwards at the last 10 years. If we turn around and look forward at the next decade, what do you think will be the biggest developments, changes? What should we look forward to in that space? I don't want to seed the question, but more resistance, perhaps? [Chuckles]

Bryan: Well, yeah, yeah. I think you're absolutely right about this being a result of success, that online learning has become so prominent, but also, I think over the past decade, we've seen a real crisis hitting a lot of higher education in terms of financial sustainability. We've seen state governments struggle to adequately fund public institutions, but we've also just seen enrollment drop since 2012.

It's really… I think a lot of institutions feel very challenged, and they see online education as a way forward. For some faculty and staff, they may resist that as something that's being imposed on them. Looking ahead to the next decade, I guess there are a few things I want to touch on. One is that I mentioned niche technologies. One is XR, so that combination of augmented reality and virtual reality, we can call it mixed reality or extended reality. XR is a pretty good term, and that has huge potential.

We know that it's got great powers for visualization, and we know that it has great capacity for socialization and personal interaction. We haven't really had a successful platform for this yet. Apple made a big splash with Vision Pro, which seems to have been a market failure. I know they're working on it. As far as we can tell, Apple is famously black box, but they're working on retooling it and offering at a lower price point. We've got a lot of other platforms, a lot of tools. Meta and Ray-Ban have been working on their glasses.

We have a lot of different ways of making that work. So, that's something I'm anticipating that we're going to keep trying, and at some point, we may succeed. I talked to the science fiction writer, Neil Stephenson, about this. I said, "Right, we went from the desktop computer to the laptop to the phone. What's the next platform?" He said, "It has to be glasses." I think we're working on that.

Tom: Can we stop before we get to the chip in the head, I guess? [Chuckles]

Bryan: [Laughs] Well, that's actually something else. I don't think we're going to use that in educational technology, but that kind of neural work, people have been working on getting probes into the brain for generations. There's some interesting work. There's a Spanish lab owned by Meta, which has been doing some fascinating work with neural probes and AI to get people who are locked in or locked in syndrome to communicate.

I wouldn't be surprised to see more and more pushes on that, especially things like imagine a tool that would let people try to transcribe their dreams while they're

sleeping, or applying this to animals, so that we could hear what cats and dogs are thinking. That could be spectacularly disastrous in a lot of ways.

Tom: [Chuckles]

Bryan: I don't think that would stop people from trying. I think that would happen in the technology world in general, not in the education technology world as much.

I'm really curious about the LMS world. The LMS world has been pretty stable. The product's been pretty mature. The big story has been just the ongoing triumph of Canvas and the decline of Blackboard. I'm curious to see if there are any changes in that. It may just be, it's a mature market that doesn't change that much, like email, but the LMS is so key to online learning. That's something that EDUCAUSE was working on the idea of next generation learning management systems for a while, and we really haven't gotten to that point yet.

The third one to look at, and this is obviously the huge one, which is AI. I've written a great deal about this. One big caveat is that the generative AI world is very fragile in a lot of ways. There's no good business model right now. There's a lot of cultural resistance, and I think perhaps most significantly, there are threats, legal threats based on copyright infringement. It is possible we'll see the LLM field change, or mutate, or shrink in some key ways. We have to keep that in mind.

With that caveat, I think obviously, AI is potentially an enormous transformer player. I initially thought it would have an affect akin to the arrival of the World Wide Web or mobile devices. I think potentially, its impact might be greater than that. It might be more like the rise of the internet itself. Of course, there are all kinds of implications for this. There are all kinds of ways to use it, all kinds of ways for it to go wrong. We can talk about that. That's one I really want to signal.

Now, allied to that is the question of resistance. Every new innovation, every new technology tends to elicit resistance in different ways. We turn to Everett Rogers classic model of diffusion of innovations to understand that. I think a lot of what we're seeing now is playing out that way. We're seeing early adopters go wild with this. We're seeing the opposite; people resisting it. I think the resistance now is unlike what we experienced with say, Wikipedia or mobile devices. I think the resistance now is much more political.

We've had political critiques of technology and educational technologies forever, but I think it's much more political now. When we have people saying that AI is akin to eugenics, that AI is fascistic, that AI is part of an oligarchy, and these are mainstream criticisms, not confined to niches of academic research, but they're going mainstream. I think if the Trump administration leans on AI for higher education, like they've already leaned on it for K through 12, I think we may see the opposition to AI become much more political, much more widespread.

I'm hearing this from every college university I've talked to, that there are faculty and some staff who think AI is horrendous in all kinds of ways. This might be the one where we really organize resistance to. That's something I think we need to watch. The other thing is, if we're looking the next decade, I hope that we think about educational technology in terms of the climate crisis. I say I hope, because we're not doing it now, and academia as a whole is generally not taking much climate action.

I think if we're looking 10 years out, we're going to be seeing, obviously, retirements, people leaving the universities and college, but we're also going to be seeing more younger people entering the field. We're seeing more Millennials and Generation Z becoming staff and faculty, but we're also going to be seeing more climate disasters as the crisis ratchets up. I think that will turn us to rethink a lot of higher education: our food service, our electrical power, our transportation, but also educational technology.

It brings us to a clear choice, which is do we double down on educational technology, because among other things, we want to reduce, say jet travel? We have more online research; we have more online classes. Or do we use educational technology to help teach students about climate crisis? Do we use more technology as a whole in order to improve our campus settings, like more sensors, more big data processing, using AI to come with better plans?

Or do we do the reverse? Do we cut back educational technology because we view it as having too big carbon footprint? We're not really having this conversation yet, but I think it's possible we will over the next decade.

Tom: Wow. You could pull a thread on every one of those, and do an hour podcast on it. There's so much there. Yeah, and I've heard stories about just the environmental footprint of AI and the amount of water needed to cool the servers that are spinning up for every one of these searches. It's not something you think about when you just go in, and you ask it to write a funny poem or something. Yeah, that's a really interesting point.

All right, so in the couple minutes we have left, I want to ask you… All right, so we talked about what's changed, what do you think will change, but what do you think needs to stay constant? What do you think we need to preserve, or hold onto, or not change as we kind of step into the future?

Bryan: In terms of educational technology, I just, not in any order, I'd mention a few things. One is since the pandemic, and I think since higher education started feeling serious financial pain, and we might trace that back to 2008 and the Great Recession, there's been a rising interest in improving how we interact with students, how we teach, how we care for students, how we do residents' life. I really hope we keep up with that. This appears in all kinds of ways.

Arguably, you could see in the amenities arms race, I'm not very excited about that, but you can also see it in things like improved standards of care for mental health. We have rolling out more therapy, more physical care for actual healthcare, more attention to student outcomes, more attention to student learning, the rise of things like teaching and learning centers. I really hope we don't lose that. I really hope we hold onto that.

It's easy to lose sight of. There's not a lot of incentive to do it, but I think it's ethically the right thing to do. It's also strategically the right thing to do. The overwhelming majority of colleges and universities in the United States rely on revenue from students, from tuition, housing, room, board, et cetera, and fees, and making those students happy, giving them the best possible experience, attracting them, retaining them. There's a lot to be done there. I think that's one that we need to do.

Educational technology plays a huge role in that. I think everything, from just the quality and experience of ed tech, to once students have graduated, being able to use educational technology to keep them in the loop, to keep them in the academic community. The second thing is to repeat myself about open education. I hope we really keep on with open. Here, I mean both OER, which is just a great idea, especially when students are financially stressed, but also open access and scholarly publication in order to increase access to scholarship, but also using open-source software and using it well.

We have a lot of great open-source tools. We think about WordPress, we think about Moodle. To do more of that, I think, is a second thing we need to do. A third is we have to really keep an eye, I think, on our public role. Academia has always been kind of Janus-faced, we've always been a retreat from the world, a place where students can learn, a safe space, that kind of thing. But, we've also always been engaged with the world, and I think it's really important that we maintain that engagement.

Arguably, right now in American higher education, there's this engagement forked upon us by what the Trump administration is doing, but there's also many, many ways we can improve Tao Yan relations, but also I think to participate in the largest struggle of our time, which is over climate change. A third is that, well, fourth, I've lost track now, another point that we can do is to maintain our critical stance so that we are not susceptible to hype, but that we approach technologies with open eyes.

That doesn't mean opposing them all and resisting everything. That means trying to understand them, relying on the big tradition of technology analysis and criticism, but also looking at how different people across academia are using technology. It's really hard to get that information out, because higher education in the US, we have roughly 4,000 institutions. It's not organized per se, and there's so much going on, so much creativity, so many experiments.

It'd be just great to get a better sense of what's going on so we can really work with educational technology in the most productive way, especially that's best for our students.

Tom: That's awesome. Yeah, so much to think about there. I think a great way to set us up as we run towards the finish line here of 10 years of TOPcast, a lot to think about. Thank you, Bryan, so much for being on TOPcast. Really do appreciate it.

Bryan: My pleasure. Thank you for hosting me. It's great to be in a program I've listened to for so long.

(*Musical Transition*)

Kelvin: Well, Tom, that was your interview with Bryan Alexander. I thought, wow. So much good stuff in there.

Tom: Yeah, I think as I said in there, you could kind of pull a thread on any one of his topics and just do a whole episode about that. It's dense, but a lot to sort of unpack. Of course, we don't have space or time to unpack them all, but we leave it in the hands of the listeners to kind of dig into the areas that they find most interesting. For you, was there maybe one or two things that sort of stood out?

Kelvin: Yeah. Well, first, I don't know if Bryan thinks of this or not, but I had a conversation with our friend of TOPcast, Steven Crawford, a while back. We got into a conversation about forecasting, and futurism, and so forth. He made a comment that stuck with me that I thought about while listening to your conversation with Bryan. Steven talked about signals versus drivers, and that a lot of futurists and forecasters use that kind of thinking in their orientation.

I heard, I thought, that kind of thinking in Bryan's comments, like there's the stuff that you can see, the signals of the… you see this thing leading to that thing. I'm no expert. What do I know? I didn't go to futurist school, but as I grasp from my quick brief chat with Steven, and then there's the drivers. There are these things that are underground that you don't see as readily, and you have to work at grasping the relationship. I thought that he made some comments that you wouldn't immediately go, "Oh, I didn't see that coming."

Then you realize, "Oh, he's looking at these tectonic kinds of underground drivers that manifest in these surface-y ways." I thought that was really interesting to kind of hear that coming out. For me, I hadn't really given thought at all to the possible politicization of AI, which in some possible future, could cause higher ed to abandon AI as a political backlash. Hadn't considered that.

Tom: Yeah. Yeah. Let's just talk about AI for a second, because that seems to be a big one, and he certainly mentioned it. Yeah, as you were describing what Steven Crawford described as signals and drivers, that's the first thing that I thought of

was AI, because that's certainly a driver, but it leads to, as you said, potential political implications.

Also, Bryan talked about climate impact. We talked about the power needs of these servers and things, and then there's something new every day in AI that's changing practice pedagogy, institutional policy. That's a really interesting one when you think about a driver.

Kelvin: I don't know, I'm no futurist, is AI the driver or is AI a manifestation of some other thing, some other dynamic underneath? I don't know. You'd have to go to be a futurist or subscribe to Bryan's materials.

Tom: Or it's a both/and, right?

Kelvin: Yeah. Do both things.

Tom: Yeah. Well, that, and also AI. I think it's both potentially a signal and a driver. But yes, I highly recommend following all of Bryan's work and watching his Future Forum, and all of the things. I think it's well worth your time.

Kelvin: We'll put links in the show notes if you're not already following that stuff. Can I just say this, because I can't not? Bryan talks to Neil Stephenson. I was like, "Wow." Then Bryan actually said good things about us and that he listens. I'm like, "The same person who talks to Neil Stephenson actually listens to us."

Tom: [Chuckles]

Kelvin: I'm like, "How cool is that?" That made my week.

Tom: Yeah, it was even off-camera, Bryan was very complementary, and it's clear he has listened to the show for a long time.

Kelvin: More than once? [Chuckles]

Tom: Yes, definitely. We appreciate that. Just as we appreciate all of our listeners, especially those who are the OGs who've been with us since the very beginning. 10 years of this, they have stuck around for.

Kelvin: I know we're heading to the exit, but kudos to Bryan for, you asked him what should stay the same. If I heard right, the focus on students should remain constant. No matter the various forms that may take, that the focus on students is the main thing. I thought, yeah, right on.

Tom: Yeah, I like that. Of course, we've talked many times about keeping students as the north star in everything that we do.

Kelvin: That's right.

Tom: I'll point out one other thing that he said that should stay the same that I thought was interesting, which is that we, in this digital learning space, should maintain our critical stance of technology. Don't be technological determinist. Don't just accept everything like tech is going to solve all the problems.

Don't believe every marketing statement that comes from a vendor, and just be a little skeptical at first, and don't be too credulous when some of these things cross our paths. I think that's wise.

Kelvin: Yeah, absolutely. Agreed. You want to put this plane on the ground?

Tom: Yeah. We should always stay attuned to possible futures that lie before us, and be prepared maybe to act depending on which way we see the winds blowing. Consulting the work of actual futurists, such as Bryan Alexander, can inform how we seek to create the future we want to live in.

(*Musical Outro*)

Kelvin: Yeah, absolutely, I agree. Glad to have Bryan on the show. Thanks for coming, Bryan. Enjoyed the conversation that you all had, Tom, and the conversation briefly with you here. Until next time, for TOPcast, I'm Kelvin.

Tom: And I'm Tom.

Kelvin: See ya.