TOPcast Episode 10: The Iron Triangle: Stimulus for Innovation in Online Ed

KELVIN   From the University of Central Florida's Center for Distributed Learning, I'm Kelvin Thompson.

TOM   And I'm Tom Cavanagh.

KELVIN   And you're listening to TOPcast: the Teaching Online Podcast. Hi Tom.

TOM   Hi Kelvin. How are you today?

KELVIN   I'm wonderful. How are you?

TOM   I'm good! I'm good. Coming fresh off of our last live recording at the Online Learning Consortium. We're back in the studio today.

KELVIN   Does that make us not live?

TOM   No. *(laughter)* We're simulated.

KELVIN   *(laughter)* You would think if I was simulated, I'd be a whole lot better than this.

TOM   *(laughter)* Yeah.

KELVIN   Something.

TOM   Something. All right. So, we've got a new topic for our many, many fans out there listening.

KELVIN   At least two.

TOM   Yeah. That's many. And so, for those of you that may be catching us for the first time and working your way through our vast library, binging on TOPcast—

KELVIN   Thank you! Thank you so much!

TOM   The first thing we always have to ask is that burning question to Kelvin of what is in the thermos?

KELVIN   Burning question?

TOM   Yes. Let's hope it's not burning.

KELVIN   That's right. That would be bad. Well, today in the thermos is a—this is a little bit different for us—is a coffee I did not brew, Tom.

TOM   What?!

KELVIN   Stolen coffee! No, I bought it. I actually just went out a little while ago to a popular coffee chain named after a character from *Moby Dick*—hmmm—and bought the fresh

	brewed coffee that I put in the thermos. What do you…Let me pour you some here and see what you got here. See what you think of it.
TOM	Kelvin's pouring from his Disney-themed thermos.
KELVIN	Yeah, it's not the…not the standard thermos. This is my backup thermos.
TOM	Okay. That tastes familiar.
KELVIN	Does it?
TOM	Yeah.
KELVIN	Well, hopefully it doesn't taste exactly like what you're used to because this is not your typical Starbucks coffee. It is a single-origin coffee from what's called the Starbucks Reserve, brewed fresh on the spot with this thing called the clover brewing system which I'm kind of in love with. I found it in New York years ago, and I thought, "Man, this thing is cool." I have not had a bad cup of coffee from the clover.
TOM	From the clover?
KELVIN	That's right. So, they marry together two things. They put together small batch single-origin coffees and this really cool computerized brewing system. You know, there it is at Starbucks: this high-end kind of stuff. Now, it costs a little bit more than the coffee of the day, but the quality's good, and it's, you know, relatively easy to get, at least at some of the higher end Starbucks locations, but you pay for that. So, I thought this coffee was a good choice for today's episode.
TOM	Hmmm, so I kind of know what today's theme is about.
KELVIN	Do you? That's good. Because I just figured I'd throw that stuff out and you'd go with it and make something up.
TOM	Let me take a guess, then. So, we've been talking a lot here locally at our institution, but I know that there has been a national conversation about the concept of the iron triangle.
KELVIN	Iron triangle. Didn't the iron curtain come down?
TOM	*(laughter)* Yes, but the iron triangle went up.
KELVIN	Oh, okay.
TOM	So, the iron triangle. The general premise is that you kind of have three domains relative to an initiative: quality, cost, and access. And specifically we're talking about higher education, and then, you can't really impact any one or two positively without negatively

impacting the other. It's really hard, for example, to increase access without reducing quality, or to decrease cost without reducing quality or something like that. So how do you impact all three at the same time is the kind of the big challenge of the day in higher education.

KELVIN   Kind of like building a better mousetrap. If you can figure that out, the world's going to beat a path to your door.

TOM   Exactly. And maybe some students will graduate.

KELVIN   That'd be nice.

TOM   So I get your coffee. It's sort of about access and cost and quality. And so, I get it. That makes some sense.

KELVIN   Iron coffee.

TOM   *(laughter)* Yeah. Or maybe we need an iron mug.

KELVIN   That's right. And I actually didn't say…This one's kind of interesting, by the way. This one's a Vietnam. I haven't had coffee from Vietnam before. It's Vietnam. They call it Da Lot, I think. It's not bad. I kind of like it.

TOM   I didn't know Starbucks was quite that exotic.

KELVIN   Only certain Starbucks.

TOM   Okay.

KELVIN   Yeah. You got to knock three times. They'll let you in.

TOM   Well, so, we'll dive into talking a little bit more about the iron triangle, but I think it's probably worth saying that you and I have talked about this as a framework for discussing topics relative to higher education, and technology in higher education through the next few months. Maybe it's a theme that we're probably going to revisit in various ways as the podcast continues.

KELVIN   Maybe an occasional mini-series or something.

TOM   Yeah, yeah. Maybe not every month that we'll talk about it, but definitely something that we'll return to from time to time.

KELVIN   We find the concepts to be important and useful and something that we should be thinking and talking about, right?

TOM	Yeah, I think they definitely resonate with not just us but a lot of people working in higher education today.

KELVIN	No, I think that's right. So, do you know where this iron triangle business [is coming] from? Other than, you know, I always joke about the, you know, often photocopied little papers that get stuck to people's filing cabinets and, you know, little cartoon figures for their laugh and "You want it when? Ha ha ha!" And then I've seen these things: "Good? Cheap? Fast? Pick any two." And it's not too far removed from this iron triangle thing.

TOM	No, it's not, but the iron triangle is actually really a thing.

KELVIN	It's a thing.

TOM	For example, recently Ithaka S+R—which is a consulting and kind of a think tank group—did a case study on UCF, and they actually put in the citations and the references for the individual who came up with the concept specifically of the iron triangle in higher education. So, that particular—and we can talk about that case study if you want—but that particular case study is interesting in that it outlines what UCF is doing to address the iron triangle, but if somebody is really interested in sort of the origins of that in higher education, I would encourage you to go look at the citations and references which are pretty thorough—

KELVIN	Yeah.

TOM	—and to kind of dig into the details.

KELVIN	I don't know. I don't remember. I have to do that now. I don't recall what they say in the references. I think the first time I saw it was in this public agenda report. A college president's talking about cost, access, and quality, and they kind of used that, but it may predate that. That was back in, like, 2010/2011, something like that. But I did write down this quote from that report because I think it's good. It sort of formally states the stuff that you said before. "The three main factors in higher education: cost, quality, and access"—which you could debate. Are those the three main factors in higher education? —"They exist in what we call an iron triangle. These factors are linked in an unbreakable, reciprocal relationship"—relationsip[sic]. That's kind of good for the coffee—"such that any change in one inevitably impacts the others."

TOM	Exactly. That says it way better than I did.

KELVIN	Nah, I liked what you said.

TOM	*(laughter)* We should've just read the quote.

KELVIN	That's good. That just sounds that sounds like education speak, but it's a thing, so there's reports.

TOM   So, yeah. It's a thing. There is a body of scholarship around it and certainly a lot of kind of policy-thinking and people who are thinking about the space of our education have had a lot to say about it. And so maybe, do you want to start with kind of what we're doing here and then we'll go broader?

KELVIN   Yeah! Sure.

TOM   So, in this Ithaka case study, they talk about two specific things that we're doing here to try to impact the iron triangle and not sacrifice any one of those arms of the triangle. Those two things are our transfer partnerships—our partnerships we have with our transfer institutions, specifically through our DirectConnect to UCF program—and online learning. And through the use of those two things, we have been able to impact the constraints of the iron triangle in a very positive way. You know, we haven't figured it all out yet, but I think we have started to move the needle in ways that a lot of other schools haven't.

KELVIN   So let's use that as a checklist. Can I do this to you?

TOM   Mhmmm.

KELVIN   Don't want to put you on the spot too much. But if we've got cost, access, and quality…So, why don't we hit those two things here at UCF—just as a little mini case study here that doesn't go down a rabbit trail too much. The things you said about UCF. So, how do those things impact cost?

TOM   All right. So, for example, the partnerships with the state colleges. A student could start their education—get their Associate's degree—at a partner institution and then transfer to UCF, and frankly, the tuition at a state or community college is a lot less than that of a university like UCF. So, cost, but it is also impacting access at the same time without necessarily sacrificing either one of them. They both happen at the same time.

KELVIN   Now, can we talk about access for a second? Because I've been in—maybe just the people I hang out with—but I remember being in some state meeting, and the idea—we were talking about the iron triangle stuff—and the access thing came up, and boy, we were all over the map. We were talking about everything from responsive website design for mobile devices to universal design for learning: kind of stuff to, you know, [make] it easy for people who don't have a college education to get a college education. How do we think that we generally understand access in this context?

TOM   Well, in my mind…As I was just saying that, I was talking more about the latter of what you talked about: about providing access to an education for those who may otherwise find it challenging to access education. But I guess you can define it for yourself however broadly you think you want to. If you want to include accessibility, like, for students who need accommodations in that category—international students, students who speak

another language other than English as their first language—I mean, there are all kinds of ways to include people in that term of access. And so, you wouldn't want to marginalize any of those, I guess, depending upon your institutional mission. And then, let's look at the third leg.

KELVIN   Quality.

TOM   Quality. So, maybe what I just suggested by having our transfer institution partnerships positively impacts cost [and] positively impacts access. Because frankly, some of these students are getting into UCF that might not have been able to get into with test scores, but by proving their ability by achieving an Associate's degree at a certain level of performance, they can earn their way into an institution like ours. And then, for quality, you might say, "Maybe the quality isn't necessarily better, but it's certainly no worse." It's exactly the same probably that they would've gotten otherwise, because they're still coming to UCF. There's no reason that there's a degradation of quality. So we haven't negatively impacted any part of that triangle in that model, and in two legs, I think we've positively impacted it. There might be others from some of our regional campuses that could articulate some of even more of the benefits associated with that particular relationship.

KELVIN   But that's cool. That's a cool little sort of mini case study [or] micro case study. That's kind of a neat thing, and I think as we proceed with this little occasional mini-series, hopefully we can kind of unbundle some of these—what do we say, angles? Sides? Components? Pieces? Whatever they are—you know, I think, maybe we can take a minute or two and unbundle them a little bit more. We started to do that a little bit. Like, for instance: quality. Quality, you know, I've thought about some, I've talk about some, [and] I've written about some. Our colleague here at UCF, Chuck Dziuban, likes to quote from Robert Pirsig's "Zen and the Art of Motorcycle Maintenance". A little lead-in—I didn't write it out here—but it has this thing about quality. You know, the moment you think you've defined it, you don't know what quality is, and there's this whole thing, you know: what is [quality]? And we try to operationalize, and—we've talked about this, you know—you try to make course evaluation rubrics and you go down this road and you think, "Are we missing the forest or the trees?" So when we talk about quality—at least in our online, blended, digital learning technology…mediated…whatever context—what do you think we're even talking about with quality?

TOM   Well, I mean, that could be a series of podcasts.

KELVIN   Ooh! There's an idea! Let's write that down!

TOM   But, I would say at a minimum, for online learning, for example, you can't evaluate it with different rules [or] with a different set of criteria than you would face-to-face, because I don't think that's fair. So, if you evaluate quality, for example, based on student success—do they get a passing grade or whatever in a particular course?—then look at the blended and online courses in the same light. Are they achieving success

measures at the same rate as, you know, more traditional courses? That is one measure of quality. There are lots of them, because I get challenged on whether or not grades is a fair determinant of learning and…

KELVIN   What else you got? *(laughter)*

TOM   Yeah! I mean, that's true. And I don't argue with it, because I don't necessarily disagree, but grades are data that you have access to, and you can compare across a lot of sectors through grades. But the other question back is, so, you know, what are you doing in the classroom that's so much better than grades? And there isn't usually an answer for that, but people are very quick to challenge the quality of online learning, but without giving me some sort of an alternative measure that's better. Now, we've done some things—just a quick cul-de-sac here—we've done some things like we've looked at student performance in courses that had a prerequisite based upon the modality of the prerequisite, because that's more about learning than grades, and what we have found is that there is really no measureable difference. What was a bigger criterion was how much time elapsed between taking the prerequisite and then the subsequent course. The longer the time lag, the worse the student performance regardless of modality. And there have been some other kinds of measures we've looked at. For example, do students complete their degrees faster with online learning? And here, that's not really been the case because it's so ubiquitous. Everybody's taking online learning. And I could list probably so much more, but we've tried to get at that question, but so far grades has been a particularly useful one, and it's equatable across different modalities.

KELVIN   But it is only one data dimension. Like, we look at success from withdrawal rates and student satisfaction and faculty satisfaction, and I kind of think it's that. I think it's this— what would that be? What's that artistic thing like pointillism or something?—it's all these little—or impressionism?—all these little pieces come together to form a whole in a kind of triangulating…I think there is something to that, because it's a rhetorical device, right? That if you have these disparate elements and you go, well, like we talk about blended learning, right? We've talked about that on just about every metric. At least here and a lot of other places, blended learning "outperforms" online learning or face-to-face, and what we mean by that is, "Oh look at success rates. Oh look at withdrawal rates. Oh look at satisfaction rates." And then, you know, you have a story, and you kind of go, "Well, more likely than not, it's a thing."

TOM   You start to build a critical mass of evidence that's hard to argue against.

KELVIN   Yeah, and so I guess in the general quality sense, I guess, you know, maybe we are talking about a bit of a portfolio of stuff, but yeah, that's good. What about affordability? You talked about the little mini UCF case study, but there's a lot of ways to move that needle, or are there? Because, you know, tuition's like the third rail right?

TOM   Yeah, and at state institutions like ours, you have a lot less flexibility to dink around with tuition prices. Private schools have more flexibility to potentially change tuition, but yet,

many of them are more tuition-dependent because they don't have state subsidies. Some state schools don't have state subsidies. *(laughter)* So, you know, there are various ways to kind of get at that affordability question. And they could be beyond the tuition. Something that we're talking about here and that some of our sister institutions in the state have done is to play around with fees. So, for an online student who's exclusively online and will not be coming the campus, can you reduce their out-of-pocket cost by eliminating campus-based fees? That can be significant.

KELVIN   Seems simple enough.

TOM   Right. Yeah. And hopefully it will help students afford things.

KELVIN   Yeah. Yeah, yeah, yeah. And, I guess, you know, we hear things about textbook costs, right? Not only are they causing students to walk around hunched over—because [the textbooks are] huge—with bad backs, they also cost an arm and a leg, and so, what can we do about that? And so, [it] seems like if you can affect textbook pricing without sacrificing quality, I think that's a thing.

TOM   Sure, I think that's a given. Yeah. You have to be able to say, "We're going to do this thing to impact costs, so, like, use open educational resources for our courses, and it won't cost students what it would cost for a textbook," but it can't be worse.

KELVIN   Right.

TOM   It's got to be at least do-no-harm and hopefully improve.

KELVIN   Yeah. Absolutely. And I guess we talked about access a little bit already—what that means—but I guess we didn't drill down into, but what are the things that we talk about when we talk about removing the barriers to a college education for folks who don't have one? What do we think that looks like?

TOM   Well, something that we've talked about in the past includes different kinds of educational models, like competency-based education. So, not only is the curriculum and the sequence different, but the pricing models can be very different. For a motivated student, it can actually work out to be much more cost effective for them. For a student who maybe is less motivated, it could end up being more expensive, so that that student has to do that kind of cost benefit in their head and know what kind of performer they are. So, if they did, for example, time-based pricing. So you pay $3,000 every six months, take as much content [and] take as many assessments as you can in a competency-based model. For a motivated student, that can be better. Or [for] a student who can perform. But for somebody who needs extra time or doesn't have the kind of grit or maybe needs to be more deliberate [or] maybe they've been out of school for a while and they need to kind of re-acclimate, that might actually be financially worse for them.

KELVIN   Right.

TOM	But I give credit to the schools that are experimenting with that because that's different. You're not going to impact the iron triangle by continuing to do things the same way.
KELVIN	Well, I think that's an excellent point. That's just about a good place to leave it—just about, right? I mean, I think, what I hear you saying there is we want to innovate an online…a teachinglearning…our path is likely going to involve one or more of these three components of the iron triangle: access, quality, and cost.
TOM	Absolutely. And without necessarily…You must improve at least some of them and you can't hurt any of them in order for this to work going forward.
KELVIN	Yeah, that's good. Well, why don't we leave it there? That's a good spot.
TOM	Okay. So, before we close, let me just kind of ask our listeners that if—
KELVIN	Is this a quiz?
TOM	*(laughter)* Yeah. It's a quiz.
KELVIN	Oh.
TOM	How much do you like us? Or not? If you have enjoyed listening to the TOPcast, do us a favor and go out to iTunes and leave us a rating and a review, because that helps to bump it up in the rankings and helps other people find it if they're looking for this kind of content. And to remind everybody that at topcast.online.ucf.edu, we always have all of the archived shows, as well as all of the resources and links to articles and things we've referenced, and if you want to know where to find out more about the coffee that Kelvin talks about, those are all linked out there as well.
KELVIN	That's right. Because who wouldn't? Who wouldn't want to know that?
TOM	Yeah! Well, some of these stories have been fascinating. I've learned a lot just sitting here across the table.
KELVIN	That's good. Well, until next time, for TOPcast, I'm Kelvin.
TOM	And I'm Tom.
KELVIN	See you online.