Mary Loder: Welcome to Course Stories produced by the Instructional Design and New Media team of EdPlus at Arizona State University. In this podcast, we tell an array of course design stories alongside other ASU Online designers and faculty. On today's course story...

Mai Trinh: I've also been delivering workshops to help other instructors who are interested in doing gamification to apply some of it in their class as they see appropriate. And I think that if you think about the broader picture, I think it is about the limitless possibilities and opening up people's curiosity and imagination. I mean, a year ago, a year and a half ago, when Covid hit, it forced so many educational institutions, not just higher ed, to the online format. A lot of instructors were not sufficiently prepare to teach online.

So I was also hoping that by sharing this example with more people, they can start seeing, "Oh wow, it's different. And there's so many things that I can do with the aids of technology that can just engage my students and better their learning experience in just so many different ways."

Mary Loder: Hi, I'm Mary Loder, an instructional designer from ASU Online.

Ricardo Leon: I'm Ricardo Leon. I'm a media specialist at the same place.

Mary Loder: Yeah, we work together.

Ricardo Leon: Let's get on with the show.

Mary Loder: Okay.

Ricardo Leon: Hi, Mary.

Mary Loder: Hi, Ricardo.

Ricardo Leon: How are you today?

Mary Loder: I'm good. How are you?

Ricardo Leon: Good, good. I'm excited. This is our first episode of Course Stories.

Mary Loder: It is. And I'm really excited because we have not only in this episode an awesome topic around gamification, but we also have a whole series of courses we'll be exploring over the next session, and we cannot wait to share the rest of these stories with you.

Ricardo Leon: Yeah, Yeah. I looked at the list of potential guests they were going to have on, and it looks pretty cool.

Mary Loder:	Yeah. Really diverse and interesting things that they're doing in the classroom and ways they're using technology. It's quite cool.
Ricardo Leon:	So, Mary, who is this podcast for?
Mary Loder:	Oh, good question. This podcast is actually for any inspiring instructors or other designers or even students, but it's really meant to encourage folks to think about what's possible and what we're already doing, and encourage individuals to not only apply some of these ideas, but maybe join the class and experience it for yourself.
Ricardo Leon:	Oh, excellent. So there's a wide array of people that could listen to it and benefit from this podcast.
Mary Loder:	Absolutely. I feel like we are giving people access to ASU like we have as employees. And we were just talking about how lucky we are because we get to interact with all these really amazing individuals all over the globe because of our access to Arizona State University, and this is giving that access to everybody.
Ricardo Leon:	Excellent. So, Mary, when can listeners expect to hear these episodes?
Mary Loder:	I think our next podcast episode will be released in two weeks, so we're going to be on a biweekly release schedule.
Ricardo Leon:	Nice.
Mary Loder:	Yeah, I'm excited. We have a lot of courses we could explore, so this could go on forever.
Ricardo Leon:	Oh my goodness. Let's get on with it. Who's on our show today?
Mary Loder:	Oh, yeah, I'm excited. In this episode, we tell the core story of OGL575, which is called Quantitative Data Analysis. It's a statistics class.
Ricardo Leon:	Okay. That sounds fun so far, I guess.
Mary Loder:	Super. No, but it is fun. The instructor, Mai Trinh, gamified and used some very intentional pedagogical strategies for this course.
Ricardo Leon:	Oh, Mary, hold on. You're using a lot of big words here. What do those mean exactly?
Mary Loder:	Sorry, feel free to interrupt me anytime but-
Ricardo Leon:	Perhaps I will

Mary Loder:	Okay.
Ricardo Leon:	Gamification. What is that?
Mary Loder:	Gamification is using intentional gaming elements in your course. So having a point system is gamifying your course, having a boss that you have to battle or having resources that you need to collect in order to achieve a certain outcome. And we'll hear more from Mai on how she applied gamification in her own course. But yeah, it's designing your learning experience in a gamified way.
Ricardo Leon:	Oh, cool. So it's applying the ideas around how a game works to your course and how you get your grades. So you essentially earning points to get a grade.
Mary Loder:	Absolutely. And there's usually a leaderboard to make the experience kind of competitive as well.
Ricardo Leon:	Oh, nice.
Mary Loder:	Yeah. So it's fun. Very motivating actually.
Ricardo Leon:	Okay, so this other word...
Mary Loder:	Pedagogy.
Ricardo Leon:	...Pedagogy.
Mary Loder:	Yeah. Well, pedagogy is most commonly understood as an approach to learning. So it's the intentional design of learning to ensure that all of the elements that you're putting together are really maximized and optimized for adult learners and children. Pedagogy applies to learning for both.
Ricardo Leon:	Excellent. So that's essentially what we're going to be talking about for this entire podcast.
Mary Loder:	It is the podcast.
Ricardo Leon:	It is the podcast.
Mary Loder:	It is exploring pedagogy.
Ricardo Leon:	Okay, great, great. So you're going to have to hold my hand a little bit through a lot of these bigger concepts. So maybe we'll interject throughout the podcast with little things that can help the listener understand better the concepts that we're talking about.
Mary Loder:	I love that. And vice versa, because I'm sure we're going to get into media spaces where I do not understand, and so I'm going to pause you as well.

Ricardo Leon: Okay. I'll get Google ready.

Mary Loder: Okay, perfect. So the developer and the instructor, Mai Trinh, she took what she knew about experiential learning and the union of technology and content and pedagogy, and created a gamified course to help her students through the mysterious and sometimes terrifying world of statistics. I know I actively avoided statistics in my own programs, so I understand that.

                       And we're going to be listening to her story as she walked through the process and outcomes along with her instructional designer, Meredith Savvides. Meredith has been an instructional designer with ASU Online for the last three years, but prior to coming to ASU Online, she was an instructor in K through 12. So she has a lot of experience, not only in the pedagogical side of higher ed, but also in the pedagogical side of K through 12. So lots of good information shared between the two of them today.

Ricardo Leon: Oh, I can't wait to hear it.

Mary Loder: Let's get started.

Ricardo Leon: Let's do it. All right. I'll cut it where you said, "Let's get started." I thought it was nice.

Mai Trinh: Well, hi, my name is Mai Trinh. I'm an assistant professor in leadership and integrative studies in the College of Integrative Sciences and Arts at Arizona State University. My research interest is leader development from the perspectives of complex adaptive systems and experiential learning. In my teaching, I teach classes in leadership, research methods and statistics.

Meredith Savvid...:   My name is Meredith Savvides and I'm an instructional designer. I work with Mai Trinh in the Organizational Leadership Program at ASU Online. Mai, I'm so happy that you're here with us today to talk us through this course story. One of the most interesting pieces of this course is your use of gamification, and we'll talk about that a little bit today, but that's one of the pieces that makes this so unique.

                       Mai, we first started working together with the course when we were working on some PlayPosit videos and went back and forth with that. And then recently getting your course QM certified, we went back and took a deep dive, and that's when some of the really interesting aspects of the course were highlighted for me and for my team as well. Could you tell us a little bit about your course?

Mai Trinh: Sure. So my course is OGL575, and that is Quantitative Data Analysis in Leadership Research. It is a fully online asynchronous course that is targeted to the master's level students. It is offered in seven and a half weeks and is, again, asynchronous. So students can take the class at their own time, at their own

pace, and hopefully come out with some better understanding and application of statistics.

Meredith Savvid...:   Wow, that sounds interesting. How long have you offered this course?

Mai Trinh: So I started offering this course in the fall of 2020, and so this is my fourth time offering the course.

Meredith Savvid...:   Excellent. Mai, what excites you about this course?

Mai Trinh: I really designed the course so that it would be fun. I've been teaching statistics since probably 2012, and with my experience, I know that students come into the class with a lot of fear, anxiety, and they're just not excited. I would love to say that, "Hey, everyone loves statistics," right? But unfortunately I've had enough experience to know that that's not true. And so I think the challenges for an accelerated online class is always the lack of student engagement and the lack of interaction.

Meredith Savvid...:   Sure.

Mai Trinh: And so to add that on to such a kind of fearful topic such as statistics can just create a nightmare for students if I'm not careful. And so drawing from my training in experiential learning theory with David Kolb, I really design it to be fun, to be an experiential process, to bring students into the journey and gamified it to be like a video game.

So in this class, students actually read a comic style textbook and they will kind of understand the storyline, they go along with the protagonist in the storyline on the journey to learn statistics, to solve the mystery, save the princess kind of, and save the world eventually. And then there are buttons to click and coins to find and quest to complete and bosses to defeat. There's a dragon. There are zombies too, and it's just really fun. And so sometimes the game playing, the gamification aspect of it, help alleviate some of that anxiety...

Meredith Savvid...:   Sure.

Mai Trinh: ... That students associate with statistics.

Meredith Savvid...:   Sounds awesome. Where were you when I was in statistics? So let's talk about some of the learning objectives. What do you hope students will take away from this course?

Mai Trinh: The formal learning objective for the course is that students will have a better understanding of statistics. They will be able to apply the appropriate techniques to analyze the data, they will be able to understand more about research in general and conduct research in a more ethical manner with integrity. But above all, and I think above all of the content that I deliver in the

class, I want students to walk away with a strengthened learning identity. And learning identity is one's deeply held belief about oneself as a learner. I want them to be able to figure out the problem. They may not know the answer, but they can know the process or the method to find out the answer. I want them to be confident about their own ability. If you come into my class thinking, "Oh my gosh, I hate numbers, I can't do this," you're going to walk away feeling like, "No, you know what? It's not as scary as I thought and I got it."

It's not easy. I mean, a stat is still very difficult. You still have to spend a lot of time and effort on learning the materials. That's not going away. But after you've spent those hours, you will learn that, okay, these are effective and these are not effective ways to look at it. Right? For example, asking questions are encouraged, asking for help is recommended in the class. If you have questions about something, ask me. Please, please ask me questions. Staring at the textbook in agony and thinking to yourself, "Why did I miss this question?" Is not a good way to learn statistics. And so above all, I think that I want students to walk away feeling more confident about themselves, feeling better about their ability to overcome obstacles. And I think that strengthened sense of learning identity is going to accompany students for a lot longer than the time that they spend with me in class.

Meredith Savvid...:   That's awesome. And do they walk away with that?

Mai Trinh: Well, I've only taught it for a year now, so I don't have a lot of data points, but I have received a lot of positive feedback from students about the gamification format of the class and the way that I conducted the class, the way that I interacted with them and helped them through the journey. Most of them, if not all, commented that they prefer this method over a traditional way to learn statistics. I mean, yes, it's still hard, and yes, they still have to work hard, but they feel like they learned the material a lot better and they had a lot more fun during the process, and they did walk away with a strength and sense of, "Okay, now I can do this."

Meredith Savvid...:   Sure. Great. I have a quick question about your textbook. You have the textbook An Adventure in Statistics: The Reality Enigma, and you talked about it a little bit. It's a comic book style. So which came first; the course design idea or the text?

Mai Trinh: Well, so it all happened in August of 2015 or 16. One of those years. I was attending the biggest professional conference in my field, the Academy of Management conference. And I was walking around the exhibition booth in which publishers come and showcase what they have. And I saw the book. At that time, I already had a few years experience teaching statistics. I know the author Andy Field, I know his work. I've used it in both my classes and my research before. So I know that the content is legit. This is a good textbook.

And then I pick it up and I flip around and I saw the storyline, the comics that is in the textbook itself. And I was like, "Okay, this is it. This is the book that I'm going to use from here on for my students." Kind of fun fact about it though is that when I took the book from school to home, and at the time I had a six month old baby, my husband actually thought that I bought the book for the baby.

Meredith Savvid...: We're starting statistics young.

Mai Trinh: Yeah.

Meredith Savvid...: So what was your experience developing or designing the course? Can you talk a little bit about that?

Mai Trinh: Sure. It was very time consuming, but also very fun. So I started out knowing that I wanted to gamify the course, and that's because of the challenges that I just mentioned. This is an online graduate level, accelerated statistic class. All of those elements are kind of disadvantages when you think about designing. And so I laid out a brief outline of the courses, what are the gamification elements that I can include? I did some Google search, found some community on Canvas, a little bit of research on gamification and identify items like badges, an item shop, bosses, quest, leaderboard, things like that.

So I just map out paper and pencil on how to include those things. And then work with [inaudible] barger for giving the badges in the class. I also kind of just develop all of the materials, lecture videos, tutorials, quizzes, practices, things like that, just like a normal course. So it was a very much interactive experience between education, content and technology. And if you know the TPACK model in education, and Mary Lou Fulton uses it a lot, I really was circling around that model and situating in between the three Venn diagram.

All of those three elements; technology, education, the pedagogy and content really interacted with each other. There are times that I've made decisions that then need to be changed because, for example, the technology offer more. You know because you've helped me with the PlayPosit content, like the lecture videos.

Ricardo Leon: As promised. I'm going to interject.

Mary Loder: Okay.

Ricardo Leon: All right. So I've heard of PlayPosit, but I only know of it as something that they do after I'm done working on the video. Well,

Mary Loder: Well, that's true. PlayPosit is an experience that you use to host a video. So it could be a lecture created in your studios or a lecture from YouTube, and you can pull that video in to PlayPosit and then embed intentional interactions like a

knowledge check or a moment to pause and reflect or a circle back. So if you didn't get something correct, it can intentionally jump you back in the video to the place where that content was told to you so that you can pass the knowledge check. So it's a really dynamic tool. And then in Canvas, you can use it as content. So it could just be in a Canvas page, or it can be an assignment, associated with points, which makes it possible to use it in gamification.

Ricardo Leon: I see, I see. So essentially it's an interruption in the content that the student is experiencing.

Mary Loder: Absolutely. And it keeps it very interactive.

Ricardo Leon: What a great idea.

Mary Loder: Yeah, it's absolutely awesome. I love that tool.

Mai Trinh: Now I can offer self check interactive questions in the middle of the lecture videos that, without that technology, it would have just been a normal quiz. And students said that they liked those self-check questions. They even liked the avatar that I asked you to put in there. They felt like, "Okay, well Dr. T's here with me and she cheered me on when I got the right answers." And so, I mean, it's a very much dynamic interaction of those three elements. And so in case anyone's interested or curious, I spent about a total of 200 hours on designing that course.

Meredith Savvid...:   Wow. That's a lot.

Mai Trinh: From scratch.

Meredith Savvid...:   Yeah. Yeah. It's a great course though. For anyone who's listening who doesn't know too much about gamification, could you tell a little bit about that?

Mai Trinh: Sure. So gamification is broadly defined as the use of game elements, video game elements, in non-game context. And it may sound foreign, but actually gamification has already invaded our lives. I'm sure, for example, at ASU here some of us may participate in the Health Impact Program, the HIP program, that this year they roll out with the Virgin Pulse. You do this activities, you get this number of points, and then once you reach this milestone, 2000 points or 10,000 points, you get something, right? And that is the award point structure in gamification.

Leaderboard also, for example, is something that Badger provides in Canvas and it lets students know anonymously who's getting how many badges and who's leading. Where's your ranking regarding relative to the class. And you would think that's something a little silly, but I was really surprised. I have quite a few type A students in the class...

Meredith Savvid...: Oh, of course. Yeah.

Mai Trinh: ... And they wanted to lead the leaderboard. They wanted to collect every piece of coins that I scattered around, and it was like a surprising motivating factor.

Meredith Savvid...: Yeah. No, that's awesome. Oh, that's like giving my high school students stickers. They'll still do the work.

Mai Trinh: Right.

Meredith Savvid...: All right, so thinking about making this meaningful for learners, what will students learn in a course?

Mai Trinh: So of course they will learn statistical skills and knowledge, but then other than those things, I also want them to learn collaboration. I want them to learn about critical thinking, communications, all of those strong skills that needed in the 21st century. And then learning the skill how to learn. Learning how to learn. Learning when they need to seek help and how to seek help or learning to strategize. Because, again, it ultimately is a game. And with a game, in order to win a game, you need to have the strategy. You can't just blindly go out there and just do whatever. And so some of the activities in the class help students learn these things in addition to the content knowledge. For example, I believe that learning from peers is a very important factor in higher education or education in general.

And I want to help them collaborate without the pressure of having to collaborate. Because I'm sure we all have nightmare stories about teamwork and people falling out. So I had something called the boss battles. It's a typical tough test in lay term, but students in the whole class can collaborate to defeat the boss. And so they can exchange answer, they can tutor each other, they can bounce answer off of each other. They schedule study sessions on their own to study the cross content, and they work together on this assignment, which is explicitly allowed within the rule. And so, again, it is just a very small thing in the design, but it really helps student really learn to facilitate those kind of collaboration in ways that work for them.

Meredith Savvid...: It's not small. It's not. Maybe it was a small idea, but that's a big thing to do for students.

Mai Trinh: Well, it's easy to set up, let's put it that way.

Meredith Savvid...: So how can a students apply what they learn in this course to their life?

Mai Trinh: That's a good question. In our program, again, I don't think any of our students are aspiring to be statisticians. And so I placed a heavy emphasis on, you don't need to learn the formula behind the test or the statistical technique. But you need to know that given a situation, what are the questions that you need to

ask? The hypotheses. What are the tests that you need to perform? And how to perform them using SPSS or Excel? And the questions, a lot of them are applied nature. So for example, and this is funny because just this semester I had a student who asked me like, "Where can I apply this? I don't see any application other than in research." And I was like, "Well just you wait until week three, you'll know."

So I have questions from handling of the coronavirus, teen's attitude about technology and Twitter specifically, people using to mobile devices around the world, child wellbeing. And that's a UNICEF dataset. The U.S. economy in the last few years, U.S. presidents, things like that. So questions about things that you will see and you will experience in your own life. People may not think about it like that, but statistic is all around us. And so as soon as you have a good understanding of the basics of statistic, you'll start seeing it everywhere. And so the applicability becomes somewhat natural.

Meredith Savvid...:   That's so cool. And questioning what data is being given to you.

Mai Trinh: Yeah, exactly.

Meredith Savvid...:   You mentioned Badger and the badges. Could you tell us a little bit more about Badger and then continue with the badges that are given to students?

Mai Trinh: Sure. So Badger is a third party tool and it can be integrated to Canvas. The way that it works is that when we set up modules within Canvas, you can set up the completion criteria for our module. And once that's achieve, then the module is marked as complete. So with the Badger integration, then once the module is marked as complete, the badge is awarded. And so in my course, I have 10 matches in total, and the student's final grades depend on the number of badges that they earn.

So it's somewhat unique compared to the accumulated point model of a traditional class. So nine badge, you get an A, 10 badges an A plus, and then eight is a B, seven is a C, and so on. And so I have seven content badges and those correspond with the seven weeks, the seven modules, the chapters in the textbook, and the different topic areas that students need to prove their competency and they achieve those badges if they pass a test with a score at 90% or above. So basically show me that you understand the content, you get the badge.

Mary Loder: Oh, Badger is really cool. We just got Badger across the entire university. So anyone can use Badger in their Canvas course, by the way. Badger is a way to create micro credentials or micro achievements, and you can associate very intentional, visual, graphical icons that you can display on LinkedIn or use as achievements in a gamified course, for example, in this one.

Ricardo Leon: Oh, perfect. Yeah.

Mary Loder:	Absolutely. And you do certain things to get the badge automatically. So you have to set it up from the instructor's side. But once you set it up, once a student goes through a certain competency or assignment, it will prompt Badger to award them with a badge, which is a visual digital icon.
Ricardo Leon:	An NFT.
Mary Loder:	An NFT kind of, yes, we are so innovative. But Badger's pretty great. And it does create that public place where a student or professionals can host their achievements or their milestones or their micro credentials.
Ricardo Leon:	So are we going to get a podcasting badge?
Mary Loder:	That'd be amazing. We should totally give those out. We'll make it really flashy because we have access to you and your team.
Ricardo Leon:	All right, listener. If you listen to every episode of this podcast, we will give you a badge that shows that you have listened to every episode.
Mary Loder:	And it will be really pretty.
Mai Trinh:	The other three badges are more on the type of activities that students do. One is a coin collector badge, and I have coins a student can earn in the class. They can earn coins by finishing practice assignments and then they can also earn coins by finding... Scavenger hunts, finding them scattered around the course. And the idea is if you spent time practicing the skills, you should get something for it, you should get some credit for it. And the coins can then be used to purchase items that will help them in their journey. The items can give them hints that can waive late submissions, they can even increase test scores. So if you spend enough time practicing, it's going to help your test, it's going to help your journey, your understanding.
	The ninth badge I have is something called the data critic badge. And that is based on discussion. I have discussion that helps students build skills related to quantitative research. For example, how do you find survey instrument? How do you develop surveys in Qualtrics, Survey Monkey or Google Forms? Once you have data, how do you code them? Things like that. They can also discuss about ethical and inethical research practices, how to interpret correlation tables, those kind of things. So if they earn a total of, I believe, 200 discussion points, they get the badge. And then the last one is the data slayer badge, and that's the boss battle. If they accumulate a certain number of battle points, then they get the badge. And that one's the fun one too.
Meredith Savvid...:	That's cool. So do they do that one, the boss or the boss...
Mai Trinh:	Battle.

Meredith Savvid...:   Battle. That's one that they can do collaboratively?

Mai Trinh: Yes.

Meredith Savvid...:   So would that mean that the whole group would get the badge?

Mai Trinh: No. And so ultimately it is still individual submissions, but they can collaborate to submit.

Meredith Savvid...:   Okay.

Mai Trinh: And the only limitation is that they cannot give out the straight answer, but they can discuss and compare and hint and do any other things that help other people. And I also have a bonus. So if the whole class average exceed 80%, everyone gets an extra reward.

Meredith Savvid...:   That's cool.

Mai Trinh: Yeah.

Meredith Savvid...:   You mentioned limitations. What were some of the limitations to your design? Did you have a bigger idea and then say, "Okay, I can't do this in Canvas," or, "I can't do this with online students." What were some of the limitations?

Mai Trinh: So there are quite a few. In terms of design, for example, I was not aware of the full level of support in terms of technology that I have here at ASU, so I design it all by myself. And so the pro of that is that my gamification course is very low tech and any instructor interested can do that pretty easily without relying on a lot of tech support. But the con of that is that of course it can be better. If it can make more it to be more like a game then is going to be a lot easier and more exciting, engaging for students. Right now I have to rely on a third party tool called Discord to take care of the gamification part of it.

Ricardo Leon: Okay, Mary. I am a 37 year old man. I have no idea what Discord is.

Mary Loder: Okay. Well, I know about Discord, but I knew about Discord because of my kids, because it's an app that a lot of younger folks use. And this course, Mai Trinh uses it in order to keep track of her chat and then gamify her chat and experiences there. So Discord's a chat app, and it's similar to programs like Skype or TeamSpeak or other professional communication platforms like Slack, which we have access to at the university. And Slack has passed our security reviews, so it's a much more secure platform. But you can host a wide array of chat options and it's really easy to use interface between both Discord or Slack.

Ricardo Leon: Great. Now I feel younger. You've given me some cred.

Mai Trinh: ... Meaning the progress, the points, the buying items, using items, things like that. All the actions that should be executable within a game, now I have to use another tool to facilitate that and somewhat manually check it. So currently, for example, there's no immediate automatic integration between Canvas grade center and Discord and gamification. So I have to manually update, "Okay, well these students have this many points and this many coins." So, I mean, the delay is minimal. I usually do that every day and does not take a lot of time, but sometimes when students achieve something they want to check their progress right away. And so it is a delay for students.

Meredith Savvid...:   And thinking about scalability.

Mai Trinh: Right. Exactly.

Meredith Savvid...:   Yeah.

Mai Trinh: When you have a large class, that's not going to be doable.

Meredith Savvid...:   Sure. In terms of grading, is it only point accumulation from the coins and the badges or are there other aspects of the grading? Maybe using a rubric or something in the course?

Mai Trinh: Yeah, so the nice thing about grading statistics is that there is a right answer. I mean, you are either wrong or you are right. So that is very helpful in setting it up as gamification. So I mentioned the two types of badges that I have. The seven content badges are test. And so students are just graded as if it's a normal test out of a hundred. And if they get 90, then they get the badge.

Meredith Savvid...:   Okay.

Mai Trinh: And then for the other three badges, the coin collector, the data critic, and the data slayer then is an accumulation of points. So for example, with data slayer, I require 300 points and the maximum that students can earn is actually 600. So they have six tries to get 300 points, which is a pretty low threshold.

Meredith Savvid...:   Yeah. How about limitations for students?

Mai Trinh: So it's a different course and most people like it more than a traditional course, but some students struggle with the new format. The obvious disadvantage of this kind of design is that once students get loaded into Canvas and they see the course shell, they were like, "Wow, what is this?" It may look fun, but in the first week it is very confusing and I've tried my best to explain and make everything clear and students do under understand. They agree that I make everything clear. But it does take students at least a week to get used to how things are structured, where items are and where they can find certain stuff.

Meredith Savvid...:   Yeah. Kind of reframe their thinking about what this course will be.

Mai Trinh:	Yep. So the learning curve is steep in this sense. I do have a suggested timeline. So if students are not into gaming, and some students are actually turned off by the gaming, then they can just follow the timeline and take the course as a traditional seven module traditional class. There's specific guideline for that to guide them through. And then another, I guess, interesting point is that I build this course so that it will engage students so that it won't be interactive. And some students just don't like that.
	Some students explicitly take online classes because they can just read the textbook, do the assignment, get their grade, and don't need to talk to anyone. And in the past I have had students who struggle with the content but refuse to talk to me or their classmates. So, I mean, I guess you can't please everyone.
Meredith Savvid...:	Sure.
Mai Trinh:	But there are some types of students who will not like this format.
Meredith Savvid...:	They're in on ground courses too. So how does this course story end for students?
Mai Trinh:	I do know that a lot of my students share with me that their work already use a lot of data and statistics and analytics. So they can already readily apply what they learn in class in their work during the duration of the course. And then this course is also a required course for all students completing a thesis within our degree program. So I know that for those students who move on to a thesis, and especially if they're doing a quantitative thesis-
Meredith Savvid...:	And this is essential?
Mai Trinh:	Yeah. And this course really definitely help them.
Meredith Savvid...:	Then I was going to ask, is this at the end or... My guess is, yes, toward the end of the [inaudible].
Mai Trinh:	It's usually in the middle.
Meredith Savvid...:	Oh, okay.
Mai Trinh:	It's usual in the middle, because for the thesis students, they will have quite a few thesis credits to take after that.
Meredith Savvid...:	Okay. How did this course, the process, change the way you work going forward?
Mai Trinh:	Oh, this course has impacted me substantially in all of the aspect of my work. So research wise, I'm now pursuing a line of research into gamification practices and the benefits that it can bring, especially to online classes and technical

classes. And also just how gamification can help create a more gender sensitive educational experience for students.

Meredith Savvid...:   Talk more about that.

Mai Trinh: The fact is that we still have under-representation of women in minority in STEM. And especially in social sciences, numbers, statistics are not something that our students like compared to math, technology, other fields. And I was wondering if something like gamification with a storyline, with a relational approach, that require you to interact with each other and you can tell that it's not a course, it's a journey. These skills are usually skills that females like better than males.

        And I was wondering if the use of gamification could also help level the playing field a little bit for the women who come into the class thinking, "I'm bad at math, I'm not good at statistics," they can maybe see the story side of the course and see the character and maybe reframe their learning identity to be able to engage with the course in a different way. I mean, I know I have examples with my female working mother students. One of them actually used this textbook, the comic style textbook, as a bedtime story for her seven year old daughter.

Meredith Savvid...:   That's so cool.

Mai Trinh: And every-

Meredith Savvid...:   I'm getting a copy.

Mai Trinh: You should. And the daughter asked, "Well, are we going to read the story today?" And she asked about graph and my graduate student had to explain about statistics in graph to this seven year old and she said her daughter's going into STEM.

Meredith Savvid...:   Yeah. Well, if you can explain something to a seven year old, you've got it.

Mai Trinh: Yeah.

Meredith Savvid...:   I always think for online courses, and I've mentioned this to a few of my faculty, "Could my mom do this course when she's 70?" And I thought that, yes, with yours she would still like all these different... She would still do the coins and she would still like...

Mai Trinh: Yeah. So my son, who is now three, actually really liked the textbook and that's how he learned numbers. Because every night he would flip through the textbook and stop at the chapter numbers, one and two and three, and sometimes he skip the four and he was like, "Where's the four?" There's a cat in

the textbook, in the comics. And he was like, "Mommy, I've been looking for the cat today." He was really cute.

So yeah, I think research wise, practice wise, teaching wise, it has a lot of implications. I think it's going to help instructors and students alike in other less resourceful communities have better, more engaging experiences in online. I think a lot of the prejudice against online learning are coming from people who don't know how to do it right.

Even when I talk to friends and families, students taking online courses, and they say, "Oh yeah, I hate this. I want to go back to class, face-to-face classes because my online classes are boring." And I'm like, "Well, they don't have to be boring. They can be very engaging and impactful, but you've got to know how to do it right." So I think there's a lot of value in disseminating this kind of work, both in terms of research and teaching. I'm pursuing that line of research, but I've also been delivering workshops to help other instructors who are interested in doing gamification to apply some of it in their class as they see appropriate.

And I think that above all, if you think about the broader picture, I think it is about the limitless possibilities and opening up people's curiosity and imagination. I mean, a year and a half ago when Covid hit, it forced so many educational institutions, not just higher ed, to the online format. And given that shock, a lot of instructors were not sufficiently prepared to teach online. And we simply just thought, "I'm just going to take whatever that lecture that I was about to deliver in person to online."

Meredith Savvid...: Record it.

Mai Trinh: Right.

Meredith Savvid...: Add a video.

Mai Trinh: And as we all know, I mean, online teaching is not a straight transfer of in person materials to the online setting. It's a lot more than just that. So I was also hoping that by sharing this example with more people, they can start seeing, "Oh, wow. It's different. And there are so many things that I can do with the aids of technology that can just engage my students and better their learning experience in just so many different ways."

Meredith Savvid...: That's so exciting. I love everything about what you just said.

Mai Trinh: Thank you.

Meredith Savvid...: Thank you, Mai. This has been a great conversation. I loved hearing everything. And we've talked about the course because we've worked together. I'm your instructional designer, but I haven't gone that in depth with you. So I love hearing all this.

Mai, thinking through your experience with designing this course, what advice would you give to other instructors who hope to implement some gamification in their course? Where should they start their journey?

Mai Trinh: Yes. So in some of my training workshops, as well as in my manuscript in progress right now, I actually have a 10 point step by step guide checklist that they can follow. But the overall advice I would say is to start slowly. It is a continuing process. And so whether you are designing a course from scratch or if you are redesigning an existing course, I would suggest just adding things in slowly one by one and see what makes sense.

And, again, the first time around, it's not going to be perfect, right? And you will identify what works, what doesn't work, and then you revise it the next time. And as I mentioned before, this is the fourth time that I've offered this course and now it finally feel like okay, everything is smooth.

Meredith Savvid...: And it's changed a little bit every time.

Mai Trinh: Right.

Meredith Savvid...: Yeah. Any thoughts or any ideas for other instructors who may be looking for inspiration in different places for designing their course?

Mai Trinh: Well, shameless little plug on myself. Read my article when it comes out, right? But no, I think online there are still a lot of examples of good gamified courses. The Canvas community was where I found my own inspiration. And even though the literature is little, there are literature out there, research studies done on gamification. So those literature should be able to help instructors make at least some initial decisions.

Meredith Savvid...: Mai, is there any place online where we should point to our listeners to?

Mai Trinh: Sure. So my ASU profile is updated, it linked to my Google Scholar page, my LinkedIn page, my CV and everything that people would be able to find.

Meredith Savvid...: Thank you. Thank you for being here, Mai. This was great conversation.

Mai Trinh: It was my pleasure. Thank you.

Ricardo Leon: Okay. That was a very interesting conversation.

Mary Loder: Yeah, I can't wait to get that book. I'm actually going to go out and buy that book.

Ricardo Leon: The comic book?

Mary Loder: Yeah, maybe I'll know how to use statistics effectively.

Ricardo Leon: Oh, nice. Even though it sounds really fun, I think I am still going to avoid statistics.

Mary Loder: I think that's fair. You're in media, so potentially you'll have to use statistics, but maybe someone will create the statistical outcomes you then put on media.

Ricardo Leon: And then I'll go and buy the book.

Mary Loder: I'll let you borrow mine.

Ricardo Leon: Okay, great.

Mary Loder: So I really loved that she brought up gender and how her course, and the gamification, and the use of avatars helps remove gender boundaries that she has noticed and has been documented in statistics around people of color and women and those who just didn't feel like that was their space or place. And using this gamified experience helps everyone feel like it's their space and they feel like they're part of a learning community that they belong to, which is really cool.

Ricardo Leon: Yeah, I thought it was interesting that she mentioned even her avatar students are responding well to.

Mary Loder: Yeah. Exactly. And it's like a level playing ground. You're all playing the same game, you all have the same opportunity. Yeah. I love it.

Ricardo Leon: So, Mary, what can the listener do?

Mary Loder: Like and subscribe to the podcast, share it with your friends. And then in two weeks come back, because we're going to have another show.

Ricardo Leon: Oh, sounds good. Where can they find these shows?

Mary Loder: They can find them anywhere...

Ricardo Leon: Anywhere.

Mary Loder: ... We're everywhere.

Ricardo Leon: Everywhere.

Mary Loder: Apple, Spotify, everywhere. But you can also come to Teach Online. That's our hub for sharing all of the knowledge that we've accumulated over the last decade with ASU Online. So it's a great spot to dig in and listen to our podcast and maybe read some articles.

Ricardo Leon: Excellent.

Mary Loder: Like and subscribe. I feel like a child who's now a YouTube star. Like and subscribe. But truly, come back and listen. We have great stories to tell.

Ricardo Leon: So we're going to be hearing a lot of different voices in this show.

Mary Loder: Absolutely. We have a lot to pull from. We have 1500 courses that run every session and we develop approximately 300 courses every year in addition to what we already run. So there are a ton of stories to choose from.

Ricardo Leon: Core Stories is produced by the Instructional Design and New Media team at EdPlus at Arizona State University. Core Stories is available wherever you listen to podcasts. You can reach us at corestories@asu.edu. If you're an instructor at ASU Online, tell us your core story and we may feature it in a future episode. Thanks for listening.