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...
Jonathan Davis:	What the team has done to make it something that you want to know more or you want to see how other people are interacting, you want to see how your decisions are impacting the room at large and how you can help the greatest amount of people based off of the values that you have. This is much closer to what our original vision and really hits our original vision of what we wanted the online asynchronous experience to be for our students.
	Because that's really the challenge is that we're not meeting over Zoom, we're not meeting in person. This is an immersive experience that's done at any time, at any place all over the world and they're still getting that immersion and still getting that experience which is an incredible challenge for this meeting. And I think it's knocked out of the park in what we envisioned.
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.
	What are we doing here?
Ricardo Leon:	We're going to do number four.
Mary Loder:	Okay. This is Geodesign, right?
Ricardo Leon:	You know what would be fun if you opened up that thing and it made that noise.
Mary Loder:	That's what I was planning on doing.
Ricardo Leon:	And I said, "What are you doing, Mary?"
Mary Loder:	Yeah, that's what I want to do.
Ricardo Leon:	Oh, okay.
Mary Loder:	And so I got it queued up.

Ricardo Leon: Okay.

Mary Loder: I think it'll work.

Ricardo Leon: Whoa.

Mary Loder: Rad.

Ricardo Leon: What are you doing, Mary?

Mary Loder: It already started. Cool. Well I'm playing the Geodesign game.

Ricardo Leon: Oh cool.

Mary Loder: Yeah, I figure if it's at the beginning of the course and you don't have to have much subject matter knowledge, it's right up my alley.

Ricardo Leon: Yeah. Wait, what course are we talking about?

Mary Loder: The Geodesign course. GIS/PUP 451. Geodesign.

Ricardo Leon: Oh cool.

Mary Loder: Yeah.

Ricardo Leon: That's what we're talking about today. Who are we talking with?

Mary Loder: Well, okay, so first of all we have some amazing people from EdPlus that are not only on the instructional design and new media team, which is typically where we pull from. They're from IXD, the immersive experience design team, which is a fabulous team, a very smart, super design, mindful, aesthetically pleasing type of minds.

Auryan and Kendall are joining us from the immersive experience design team. And then we also have Christine Moore, a fan favorite from IDNM.

Ricardo Leon: Yeah.

Mary Loder: She helped with the conversion from one platform into the one they're using now. And then we also have Jonathan Davis, who's one of the instructors for this course and helped ideate the entire experience. Really cool. I'm very excited. And also, give me a sec because I'm going to play this game.

Ricardo Leon: So essentially listener, what Mary is doing is this as a simulation of a community.

Mary Loder:	A fictitious city named Orion. Good timing. I'm reading it right now. It looks like Tempe but it's not. It's the city of Orion. Not to be confused with Arion, it's Orion like the constellation.
Ricardo Leon:	Check out the show notes to get a real handle on what Mary is talking about.
Mary Loder:	Orion and Orion.
Ricardo Leon:	The difference between Orion and Orion.
Mary Loder:	It's definitely not influenced by the designer.
Ricardo Leon:	Right.
Mary Loder:	I like it. And it sounds like Christine's one of the characters in here too. I can't wait til I-
Ricardo Leon:	Oh, yeah, she plays some voices in there.
Mary Loder:	... come into contact with her.
Ricardo Leon:	So yeah, listeners get ready for that. We're going to have that conversation go on and we invite you to go-
Mary Loder:	Oh, I'm in here too. It's actually named Mary.
Ricardo Leon:	Is it you?
Mary Loder:	I mean it's not me, but maybe they were influenced by me.
Ricardo Leon:	Oh cool.
Mary Loder:	Who knows? Looks nothing like me but maybe.
Ricardo Leon:	Okay, well.
Mary Loder:	I'll hold onto that.
Ricardo Leon:	You are the only Mary.
Mary Loder:	Ever.
Ricardo Leon:	Ever.
Mary Loder:	No, I'm just kidding. There was another Mary who was actually a designer for this course previously who helped with the Muzzy Lane stuff.

Ricardo Leon: Mm-hmm.

Mary Loder: Yeah, okay. So on the screen they do little sections of the map and it tells you where you're going to be making decisions throughout the workshop, which is that experience of collaboration between all of those stakeholders and the constituents that will be within there that you're representing so you're doing a needs analysis with them. I eventually would imagine. But this is the beginning module. So you're just getting an idea of where the stakeholders might be, who you might want to pull into these collaborative conversations. This is really cool.

Ricardo Leon: Yeah. And it's a choose your own adventure. Certainly you can put out different policies or different suggestions for policies and see how the community reacts to that and there are visual cues to tell you how they're feeling about it.

Mary Loder: Oh yeah. This one just goes, "Hey, did you consider the mindset of the person you're talking to? Are they open to compromise or are they limited in their compromisation?" That's good.

Ricardo Leon: Mm-hmm.

Mary Loder: I'm choosing open to compromise because I'm an optimist.

Ricardo Leon: We will be of course, as always interjecting, but we've also included in this episode a little bit of audio. So you're going to hear Jonathan actually experience this workshop for the first time. And we also invite you, listener, to go to our teach online article and follow the link and experience the workshop for yourself.

Mary Loder: Oh, you select an avatar when you get in there. How fun. You name yourself and you select an avatar. Well, I've always wanted to be a blonde. Let's go.

Ricardo Leon: All right, folks. Mary's deep into it. So we're going to get on with the show.

Christine Moore: Hi everyone, my name is Christine Moore and I am the instructional designer for GIS/PUP 451. The course is Geodesign and Urban Planning. And today around the podcast table we have...

Jonathan Davis: Jonathan Davis, an instructor in the school of Geographical Sciences and Urban Planning, and the instructor for this course.

Auryan Ratliff: My name's Auryan Ratliff, the immersive experience design manager at EdPlus.

Kendall Slaught...: Hi, I'm Kendall Slaughter and I'm a senior immersive designer on the immersive experience team at EdPlus.

Christine Moore: All right, so in fall of 2022, this course is going to make history with one of the first collaborations with the EDPlus instructional design team and the immersive

experience design team at EdPlus. We work together with Jonathan, the instructor of the course on creating this new experience. Jonathan, this is actually the newest version of the workshop. So why don't you tell us a little bit about how this experience came about in the course and what were the origins of this experience?

Jonathan Davis: So this course is co-designed by myself and Dr. Elizabeth Wentz. And we both originally learned about Geodesign and experienced Geodesign by participating in a live workshop hands-on experience as participants, as stakeholders. And we felt that by being participants, by seeing the result of a workshop, that we were able to much easier understand the behind-the-scenes elements and what went into conducting a Geodesign workshop and in turn understanding the core concepts of being a Geodesign facilitator as we studied this subject.

So for this course as an online course, we wanted to be able to offer students an opportunity to have that experience before diving into the material. So to be able to connect the dots between what we're talking about in the textbook, what we're talking about in our lectures, and what a real world experience feels like and what their participants as a facilitator would experience.

Christine Moore: And geodesign itself is a very specific term. I mean, I know myself as a complete urban planning novice, I didn't know exactly what geodesign was, so why don't you give us a little bit of background about what that specifically means?

Jonathan Davis: So geodesign as a elevator definition is it's geography led design. It's understanding your environment, it's understanding the geophysical and cultural values tied to space in place. And it's designing within the constraints of both the social and the environmental limitations of the environment.

With workshop and geodesign, it's understanding how your earth processes run, your cultural processes run, and making decisions within those constraints. And within this workshop experience, we anticipate what would be suitable plans for a given geographic area, but what we as experts might believe are suitable could change rapidly as we get more information from the community, from the key stakeholders in the community.

So we also include a participatory approach to get more community value, more community input to understand what are the needs on the ground for the people who occupy the space and not necessarily what experts would think were the ideal space. So it can be both a scientific and a community-based approach that's ultimately led by geography.

Christine Moore: That's a fantastic description. And I have light bulbs going off in my brain right now. Geography-led design and everything that encompasses those terms in that area. So what do you hope students walk away with from this class? Or what are they expected to learn? Now, the workshop experience that the students will be participating in are actually just a small percentage of the

course and it's in module one and it really introduces this idea of how to design around other stakeholders, what's going on in the community, what services are available in the community. So beyond that, beyond the experience, what are students going to be learning in the class?

Jonathan Davis: So Geodesign, what we hope people learn from this class, students learn from this class is collaborative design, using science as a foundation for decision support, but also using your group, your experts, your community to make decisions that can benefit the greatest amount of people with the least amount of negative impact on your environment.

So when you're going into this course, it's not just experts designing something, it's being able to work with minds from different perspectives, from different walks of life that occupy a target design area and being able to work with them and make informed decisions based off of community needs, but also based off of what is constrained by the environment, what's allowed by the environment. So basically being able to work with people in a design approach. It's not a top down approach, ideally it's a collaborative approach and it's not siloed in one discipline. It's including many disciplines.

With the literature it specifically identifies design professionals, geospatial technology experts and geographers, scientists, information technology and community participants. Those are the four main groups that we wish to bring in on a geodesign process because experts can provide knowledge, community can provide values, plannings provide expertise in design and information technology professionals allow immediate impact simulation. You get immediate understanding because you do all this analytical work to understand impacts on potential designs prior to the workshop.

And when you make a decision, you have done all your analysis previously and your stakeholders, your group can see what that impact is on a short-term and long-term design. So you can make informed decisions based off all the work that was done previously. And the people that need to be there that need to make decisions can see it in real time or as close to real time as possible.

Information technology also allows people in this online environment particular, instead of it being like Dr. Wentz and I were in a room doing a geodesign workshop technology is continuing to improve and as we've experienced through this pandemic, you are able to work from different states, from different neighborhoods, from different countries and collaborate. And that's the future of geodesign is to have experts from around the world and people that in the community might not be able to show up to a room, but they can participate from their home, from a computer, from a library to be able to have their voice heard and have an impact on the decisions.

Christine Moore: And so you've mentioned collaboration in different ways a couple different times and so I'm wondering is that need for collaboration or that desire to give

Jonathan Davis: Yes. Many instances we talk about in course, it's like this is how it should be and that's how many design, top down design approaches, this is what it should look like. When you're in a workshop, you have people get in your face telling you what it should be from their perspective, which can be the complete opposite of what you want. And we want this experience to show that there are many values in a design approach. There are many different ideas on what a community should look like and how you can use scientific decision support, community knowledge, and just talking face-to-face or talking over the computer to be able to come to a compromise decision and come to something that benefits the most people.

Christine Moore: And that's a great point. The workshop was not designed to be the course. Students are not taking your course so that they can practice being in a workshop. The workshop is actually an activity in module one that sets up how students might desire to engage in these types of activities in the future. Is that correct?

Jonathan Davis: Yes, that's correct. When you're going through the workshop, you don't know much about geodesign. You might have viewed the first couple of lectures on geodesign in module one, but once you do the workshop and you progress to future weeks, you connect that, "Oh, that's what I experienced in the workshop and this is why we do that." Or, "This is the prep work that we do so that this can take place."

And that's what happened in the workshop. It's being able to reference the workshop as an end deliverable, as a Geodesign facilitator and seeing how everything works together and different approaches to Geodesign can be implemented based off what you know from your experience in module one. So it really, we believe provides clarity on future concepts because they now have experience that they can tie to the definitions, terms and approaches that are described in a textbook or in a lecture.

Christine Moore: Well, that's a really good time to jump over to the immersive experience design team who's also with us today. When you first learned about the workshop and the Geodesign course and how the instructional team was looking for creating some type of experience to set the students up for the type of success that Jonathan described, this experience was initially built in a program called Muzzy Lane, which was a very simple, straightforward, two-dimensional decision tree type experience, which was fantastic and there was a lot of work that went into creating the decision trees and the scripts, hours and hours and hours of work time.

But it didn't necessarily bring in, like Jonathan mentioned, the intensity of collaboration and what it's like to work with the different community

stakeholders. Again, it was very two-dimensional, it had a very standard script. While there was a decision tree, there weren't many options for reacting maybe emotionally or kind of reacting in the moment. Everything was kind of fed to you. So that's absolutely one of the elements that was brought into this new version of the workshop.

So let's start there then. When you meet with instructional designers or faculty that are looking to kind of avoid some of those square pegs or some of the very traditional tools that we tend to use or that are already available in Canvas, what were you all looking to do with this workshop experience specifically to bring it to life?

Auryan Ratliff: So this project was unique because you all did come to us with such a great structure and framework for the experience, so our job was largely to just bring to life what was already there. We always like to start with the actual learning objectives for the experience. These are educational experiences. So if the students don't get the learning objective, then we're doing our job wrong. So when we did hear the emphasis of this experience was around collaboration and problem-solving and the emotional nature of a workshop, we knew we really wanted to lean into those elements. It's not so much about the actual vocabulary or the terms, it's about that feeling the students get in the experience.

So a lot of the work that we did was around really trying to evoke that feeling. A few of the things we did along those lines, we wanted to bring the stakeholders you're working with to life. Originally in the Muzzy Land experience, they are 2D little avatars who are sending you text messages. It's largely a text space experience. So with this new version, we did bring out full 3D animated models who are blinking at you and looking at you and talking to you and-

Christine Moore: Giving you side eye?

Auryan Ratliff: Yes, yes.

Christine Moore: Giving a little bit of side eye?

Auryan Ratliff: They're getting emotional as you make decisions if they're not decisions that they like. So that was one of the first things that we did to make this experience a lot more personal. And maybe Kendall can speak to some of the updates we made around the design reflecting real GIS tools.

Kendall Slaught...: Yeah, definitely. Even though the instructional designers initially did the best they could with the tool Muzzy Lane, there was still just a lot of limitations in how students are accessing the maps in the experience, which is a critical piece of the simulation. So one huge update that this new workshop experience has is it actually leverages a Mapbox SDK.

So there's a fully interactive map of the city of Orion in the experience that students have agency to zoom in and out of, we can layer data on top of it, the different bike paths in the experience as well as the land use data. So that was a huge upgrade just from the start for the actual experience of the student is centering the experience on the map of the city of Orion.

Another really impactful thing we've done in this experience is the addition of sound. Audio makes a huge difference in an experience and something that was so interesting from an initial design session that we had with the faculty is they said they want to evoke feelings of tension because these workshops, when you're collaborating with other people, it's not always going to run smoothly. You have to learn to compromise and empathize and hear other sides of stories.

So it was a really interesting design challenge of how do we evoke tension in an asynchronous experience that students may want to just blindly click through? How do we keep them emotionally engaged? And things like the animated characters and sound design, all of these play a role in keeping the students engaged in feeling like they're actually collaborating with other people, even though it's essentially a simulation in a game with non-playable characters involved.

Christine Moore: And going back to the idea of the learning objectives, that the learning objectives were to set the students up for what collaborations might look like or workshops this might look like in the future of their careers or in other courses that they take and even further along in this course. But the importance of what you all added, the sound, the maps, the emotion. When we were knee deep in developing the content, I swear to goodness, there were times where I was like, this could not be important and this, it's not important. We need to focus on the vocabulary.

I mean, as the instructional designer, we purposefully pushed those themes, but when the objective is to get the experience, you just would not reach those objectives if you did not have all of the things that the immersive design team added. Like you said, the sound and all the interactions and it heightened the experience a hundred percent. And in hindsight, and having seen the finished product at this point, I'm just like, "These guys are geniuses."

Kendall Slaught...: Yeah. It's one thing to just make the initial kind of user experience improvements. Like, let's have a working map where you're not flipping between tabs and split up the dialogue and make things easier to read. But then you bring all of those details together, the little design things like the characters and the audio and the way that we've added additional content to the story. All of those things make such a huge difference. And just for me personally as a designer, I've learned so much working on this project about how you make those choices and implement those details to transform and experience and create something immersive and engaging.

Auryan Ratliff: I also just want to add, I absolutely love hearing that from your perspective because that's what we wanted to do for the IDs. We know that especially with online education, technology's evolving so fast and the experiences that students are used to and want and are going to continue to want going forward are always changing and I don't think it's fair for us to expect our IDs to be experts of a new realm or new industry every couple of months.

                    So I'm so happy and I'm glad that we can take this area and make it something where now the IDs don't have to worry about it. I mean, obviously we want you to be concerned, we want to make sure we're hitting those learning objectives, but I'm glad that you trusted us enough in this space and that brought us to a point where we could use our expertise and your expertise and really make something together that I don't think would've existed beforehand. And we really hope that that continues to happen, especially as technology gets more advanced, these experiences become more complicated and we have more courses on ASU online.

Christine Moore: Right, right. And that's a credit to, I don't know if the right word is the overall hierarchy at EdPlus, but creating your department, making sure that your department is funded and staffed and has all of their research needs met so that more courses can have these experiences. This is just one of the first ones, correct me if I'm wrong, but we can expect to see many more of these types of experiences built for ASU online courses, correct?

Auryan Ratliff: That is absolutely correct. That is the goal for this team. We hope to eventually be in all ASU online courses. I know it's a lofty goal. We may not hit till 2050, but yes, absolutely. That is our goal.

Christine Moore: You're young, Auryan.

Auryan Ratliff: Oh, thank you. Thank you.

Kendall Slaught...: I also just wanted to add that this collaboration is also truly so much gratitude towards Jonathan and Dean Libby Wentz and the faculty, since this was originally their idea. We could not have come up with something like this on our own and it's really inspiring that they had the passion and the vision to create something like this for online students. That just really blew the experience out of the water for me.

Jonathan Davis: So originally, Dean Wentz and I, we saw, it's called the Lab and it's basically video for training or an interactive video for training how to not be an academic fraud and how to report misconduct in a laboratory to make sure that results are consistent. And when we saw that, we were like, "We want to recreate something like that for the Geodesign class, for the workshop." And what we ended up creating was a 1980s text-based adventure in Muzzy Lane. And then this team brought it to that level of what we had envisioned and we couldn't be happier with what this whole team has done to make it happen. But we were in

1980s and you brought us to 2020 with our experience, the technology-wise. So it's been amazing to see how it's developed.

Auryan Ratliff: I'm so happy to hear that. I think I'm seeing something here as we're all talking about this particular subject is all of these parties were needed to make this game successful. We needed the passion and the dedication from the faculty. Thank you Jonathan. And we needed the organization and the actual planning and accountability that the IDs provide. And then we also needed the UX expertise and these gamification skill sets that we brought. It really was something neither one of us could have done on our own. And I think that is also one of the things we learned a lot about this is, even if we wanted to we can't do these things on our own. You have to be deeply integrated with the IDs and the faculty.

Christine Moore: Mm-hmm. It's a perfect example of the symbiotic relationships of all of the departments. And it takes kind of maybe finishing up a project to see how everything really came together appropriately and you said it perfect. You know the vision and need of the instructional team, the instructors themselves who see this need for their students, and then the IDs that can say, "Okay, these are the objectives that we really want to build an experience around."

And then of course, just the technological capabilities of the design team, the programmers, the developers, because it's not just those who are sitting around the table today. There's people plugging numbers and coding and doing things that I wish I should have studied in college, but I took PowerPoint classes. It's been that long. So yeah, this course is a great example and hopefully a really wonderful starting off point for the future projects to come. Given that discussion about the original, not 1980s, I mean maybe a little bit of Oregon Trail in there, but-

Jonathan Davis: There were static maps, so that was a bump up for time.

Christine Moore: Since you've seen the original experience run in a couple of classes, what are your hopes for the students this fall and what are you expecting to see?

Jonathan Davis: The biggest challenge with the previous iteration of this was that you didn't have the emotion, you didn't have the comfort, a lot of the touches that we talked about. But what's different now is that just going through it myself, before you could be done going through this experience within two minutes. This makes you want to explore and interact.

And you might be in this gamification experience for the workshop for a half hour going through the different options. Whereas before students might just wanted to get it done where this is a very enjoyable, immersive experience that really draws you in and makes you want to explore what's going on. As someone who had a large hand in writing the original script and I knew the options,

created a lot of the original options, I was pulled in and wanted to know what happened next.

So it's like what the team has done to make it something that you want to know more. You want to see how other people are interacting. You want to see how your decisions are impacting the room at large and how you can help the greatest amount of people based off of the values that you have. It's really special compared to the others. Not to say that the other one didn't allow students to think about geodesign and get some experience, but this is much closer to what our original vision and really hits our original vision of what we wanted the online asynchronous experience to be for our students.

Because that's really the challenge is that we're not meeting over Zoom, we're not meeting in person. This is an immersive experience that's done at any time, at any place all over the world. And they're still getting that immersion and still getting that experience, which is an incredible challenge for this medium, and I think it's knocked out of the park in what we envisioned.

Auryan Ratliff: If you don't mind, do you want to a full screen and let Jonathan play through?

Christine Moore: Yeah, there you go. You can click through whatever.

Jonathan Davis: Okay. I like the music. Is that music in the app?

Christine Moore: Yes.

Auryan Ratliff: Yeah. That's nice. That's nice.

Jonathan Davis: That is the experience, yes.

Auryan Ratliff: I'm trying to hold back so much. I don't want to-

Jonathan Davis: [inaudible] talk when you're arguing with people?

Auryan Ratliff: You'll see. We don't want to ruin any of the surprises.

Jonathan Davis: Oh, I like the characters. That is-

Auryan Ratliff: Oh yeah. Those are great.

Christine Moore: Great. Well, and that was one of the main goals of this upgrade, wasn't it? To start integrating more life like characters and reactions and comments to-

Kendall Slaught...:   Yeah. To actually feel like you're interacting with other people.

Auryan Ratliff: That was the learning objective. Not so much learning vocabulary or specific terms, but getting a sense of the feeling of working with other real stakeholders

who maybe don't have the same opinion as you. So I'm glad that emotion in those characters are coming to life in this new version.

Jonathan Davis: I assume this one was loosely...

Ricardo Leon: It blinked.

Jonathan Davis: ... prior to pandemic.

Auryan Ratliff: Yeah.

Ricardo Leon: They move. That's so cool.

Christine Moore: You may see some personal reflection in the avatars from-

Speaker 7:   Hi, everyone. Look!

Auryan Ratliff: Our star, Christine.

Christine Moore: Yep.

Auryan Ratliff: It's great, Christine. We seriously love it.

Kendall Slaught...: Yeah, we love it. And it's especially great when the other stakeholders come in and they all have a different voice. It brings it all to life.

Auryan Ratliff: All the character, the voice lines more so than the animated characters, I think bring these stakeholders to life. There's such attitude and personality there.

Jonathan Davis: [inaudible]. I thought that was you talking. That's you talking, not you talking.

Speaker 7:   Did you see this?

Kendall Slaught...: And see all of this is the same content that I think you guys initially wrote for the Muzzy Lane, but now it's-

Jonathan Davis: It's just-

Kendall Slaught...: ... broken out as the visuals with it.

Jonathan Davis: Those PVF maps were so dead compared to. They were lifeless.

Auryan Ratliff: Yes.

Jonathan Davis: I mean it was still something, but it's not this.

Auryan Ratliff: Yeah, no, we're so excited that we could actually mimic what real GIS tools look like. The fact that you're actually working with real geospatial data, it feels like such a next step for the experience.

Kendall Slaught...:   Mm-hmm. And then also just having the agency to zoom in and out, toggle your land use data on and off instead of flipping in between images.

Jonathan Davis: So I don't know if you saw, but you can put yourself in the frame of mind of are you going to represent your community? Are you going to come in with an open mind or are you going to represent with open?

Ricardo Leon: So you set the parameters before you get into the...

Jonathan Davis: Well, you set yourself and put your mindset in how you're coming into it because the position that you take is not popular for students as a concerned citizen, but for someone who owns a home, it's a very popular, in the area, it's very popular opinion so it's really trying to transform your mindset.

Auryan Ratliff: Something I want to call too, is in the top left corner, as you make decisions, the emotions of your stakeholders are also reacting, so that first decision's also kind of your first impression to the people you're working with. So before they had no real emotion towards you, but now you can see everyone's kind of neutral. Yeah, he loves what you did, but everyone else is a little hesitant.

Speaker 7:   Great job, everyone.

Jonathan Davis: And I think that's key for the students is instead of running through it, they have to know who these people are to judge their, to know their reaction because that's what you do in a workshop too. You introduce yourself, you find out who everyone is, and then you know who you have to work with.

Kendall Slaught...:   Yep. You can actually click on any one of those stakeholders avatar in the left hand side as well and you get even more detail about what their goals for-

Jonathan Davis: Look at that.

Kendall Slaught...:   ... the workshop are, what their interests are.

Auryan Ratliff: And their reactions will update as well.

Kendall Slaught...:   Yeah, we have different animations for each character where they look really upset or really happy and they're dynamically loading based off of their emotion at the time.

Christine Moore: The best part is when they start arguing with you.

Auryan Ratliff: Yeah.

Christine Moore: They give you their angry face.

Jonathan Davis: Oh yeah, I see.

Auryan Ratliff: Libby's a little upset about that one.

Jonathan Davis: Terry's not happy.

Auryan Ratliff: Yes. So I don't know if this is your first time seeing it, but this is one of our agitator characters who kind of just expressed frustration with the choice you've made and you have to figure out how you're going to handle that with that particular citizen and the response you have here will obviously affect how the stakeholders feel about you.

Jonathan Davis: This game is very close to what you would experience in a Geodesign workshop. And aside from being in there and the sounds, the arguments, this comes very close with the tension that you can feel, the excitement, the negotiations, the alternate proposals. So this is a good introduction to what it feels like when you're a participant that will be a good foundation for when you learn the core concepts and the behind the scenes work of a Geodesign workshop.

Christine Moore: So what kinds of words or phrases are you hoping to see in those course evaluations?

Jonathan Davis: Well, life changing.

Auryan Ratliff: Perfect.

Jonathan Davis: My world changed after I took this course and I want to be an urban planner or I want to be in geospatial technologies because we have a very basic requirements. But a lot of times we waive that and many times more than half the class is not an urban planning major or is not a geography major. They're really coming from all over the university to take this course. And each time we've had it, we've had over a hundred students in the undergrad and usually 20 to 50 in the graduate, which is a massive graduate course.

                     So that we have not only people that are in our own major that are very familiar with some of the core concepts that are explored in our field that a good foundation for going in, people that have never had an urban planning course or never had a geography course or never had a GIS course are being introduced to these concepts. And there are a lot of people that want to take additional courses after experiencing this course and this workshop and seeing what it's about. So that's what we really like to see is that this changed my plans for my future career.

Christine Moore: That should be all of our, that should be a goal for all of us to impact students enough to want to make change. And you mentioned Dean Wentz. So Dean

Wentz, she teaches the graduate version of the course. Is there anything that you want to say about the difference between the undergraduate courses and the graduate course or that course of study in general? If they didn't take the 451 class, what types of students might take the 551 class?

Jonathan Davis: So there are additional assignments that are appropriate for graduate students that are in the 551 course, but it's the same target for, you don't have to take the 451 to take the 551 and be successful. We recommend if you're a grad student and you're in urban planning, geography, or another field and you want to learn about geodesign, take the 551 course. If you're an undergrad student and you want the same desire, take the 451 course.

Now we do have a second course that is a practicum where you take the theory that you learned in the experience that you learned in the workshop and do an applied project, but that's for both students to matriculate from 451 and 551 in that course. So otherwise, there's standalone courses that have the same learning objectives, 551 and 451.

Christine Moore: So do you get students maybe from Del E. Webb or from the HUD programs that will cross over and take a course like this?

Jonathan Davis: We do. And historically this is a collaborative course that's supposed to have been offered to, I believe, University of New South Wales and Kings College. So it's not just different satellite campuses within ASU. It's also students that could potentially be from those universities as well, taking the course or they use lectures or similar resources.

Christine Moore: We're going global.

Auryan Ratliff: Absolutely. I just wanted to mention, I believe that is through the Plus Alliance initiative as well.

Jonathan Davis: Yes.

Christine Moore: That's the name of it. Plus Alliance.

Auryan Ratliff: Yeah, if you're looking for that, Plus Alliance.

Jonathan Davis: Students from the Plus Alliance. There's a sound bite for Auryan.

Christine Moore: Plus Alliance.

Jonathan Davis: Yeah.

Christine Moore: So how long have you been teaching this course?

Jonathan Davis:	So we have offered the Geodesign and Urban Planning course since fall of 2018. And the workshop experience was through Muzzy Lane. And when we first offered it, we were happy. It was different from what has been offered traditionally in urban planning or geography course, many online courses. It was a step above what we have seen in many online courses, the traditional offerings. But our original was to have live action actors talking through and having a real live experience. So Dean Wentz said, it's like, "We like Muzzy Lane, but we can do better. And then that got the ball rolling into pursuing other ways to make this a truly immersive experience for our online students.
Auryan Ratliff:	And then I think that's where our team got involved. I know our first interaction with Geodesign was through a slack in the general channel from Joe Benfield, the original ID on this project kind of just asking, "Hey, does anyone know anything about gamification here at EdPlus? We were a very new team at that time. Just for a little background for everybody. The immersive experience design team is actually a new vertical on the larger UX team. We had just officially made that change. So we were now immersive, kind of looking for opportunities to expand the team and this seemed like the perfect opportunity.
	So we reached out to Joe, we had a few further conversations around what is geodesign, what we're looking to do and after we talked, it seemed like a perfect match. And I feel like right after we had that meeting, we kind of hit the ground running. And before I knew it, we were doing weekly stand ups and talking about all the changes we want to make and it feels like we've been working on that ever since.
Christine Moore:	It's so true. The stars aligned that month when an instructor was looking for it, the ID was interested in it and then your department just happened to be available and ready to go.
Auryan Ratliff:	Yes.
Christine Moore:	We really jumped into this right from the beginning and yeah, everything just came together really nicely. But it's one of those things. Not all projects come together that quickly and the way that the team worked together, because we spent many hours going over little tiny details. And again, everything fell into place. The personality, the desire, the creative intentions with the actual instructional materials. They just came together really nicely.
Auryan Ratliff:	Absolutely.
Kendall Slaught...:	What I also love about this project for our team is with immersive technology, people immediately think about virtual reality or augmented reality, which our team does do, but-
Christine Moore:	Or something in a very standard game format.

Kendall Slaught...: Yeah. And this project really proves that you can make immersive experiences and engage students in a 2D format that's delivered through desktop, which is scalable and accessible to students around the world. And so I think this is a great piece just for our team's portfolio in a sense of showing we don't need to maybe invest in a VR experience. We can create immersive content in an accessible and scalable way, even if it's just delivered through a computer.

Auryan Ratliff: And actually, if you don't mind, I want to touch on that. I'm going to pull the curtain back slightly. So this is our first official launch where this experience is a part of the course for credit. However, there was a previous version of Geodesign that we originally designed to be a mobile application. So we had an Android application and an iOS application and the goal of this was to bring augmented reality functionality to this experience, which was really cool and was really exciting.

But after building the experience and testing it, we saw that it did in this particular use case, create a barrier of entry. You had to go from Canvas to the app, some phones weren't completely updated. And we saw, okay, people like these experiences, they want to engage with them, but we need to make it easier for students to get to it. So that was one of the larger decisions we've made going into the newer phase of this project of how do we bring this to desktop and how can we make this more accessible for students?

So now it is just one button click in Canvas, the experience opens in a new tab and it can be full screened to feel like a full on game experience. So that was a really big lesson we learned as well. Sometimes a bigger shinier thing isn't the best way of delivering the experience for the students.

Christine Moore: And that's kind of the ongoing battle. What's available in education and education's desire to integrate technology because if we went to the level of VR, it opens up a whole Pandora's box of materials, technology, access, internet speed-

Auryan Ratliff: Headset.

Christine Moore: The headsets, and all of the bells and whistles that go along with that, so if all of your students can access it through one click, education's probably going to oftentimes default to that type of experience. It doesn't mean that the other experiences aren't possible because they're coming down the road. Yes.

Auryan Ratliff: Yes. I want to throw that in there too. There's a time and place for everything. We-

Kendall Slaught...: Yeah. We love VR.

Auryan Ratliff: We love VR, we want to make more VR. There's a ton of fantastic VR initiatives around the university like Dreamscape and many others, so we understand the

potential for VR, but we also see the immersive gamified realm to be very large. And we know that these 2D accessible online experiences need to be a part of that as well. But if you have fun, interesting VR ideas, please bring them to us.

Kendall Slaught...: Yes.

Christine Moore: I do.

Auryan Ratliff: Oh, well perfect.

Christine Moore: Well you know I VR all the time.

Auryan Ratliff: Yeah. IDs, if you're listening.

Christine Moore: I do have one. Yeah. I do have one for you.

Ricardo Leon: So Mary, how was your immersive experience?

Mary Loder: I think it's pretty cool. I like that it's really storytelly... storytelly. Storytelling. I like that it's really storytelling-driven. So it's based on a story. There are specific outcomes you're looking for, but I also like that it's flexible and you get to make some choices because it makes it far more interactive and connective. I liked that I got to choose my own avatar. I got to name myself. That was pretty fun. And the characters definitely looked better than the characters looked in Muzzy Lane. So no offense. Muzzy Lane's probably a great tool for those who do not have an immersive experience design team like we do, but we are very lucky, very blessed with our IXD team at EdPlus.

Jonathan Davis: The key with this game and with the design is that with Geodesign, you want people to be able to interact with geographic data. You want people to interact with other people, and you want people to be able to understand their environment and understand the constraints of the environment and look and interact with different plans.

And this game, you can dive deep into the map. You can turn on different data, you can see how it interacts, how the plans overlap and interact with each other. And it really helps you understand your study area. And that's exactly the goal of Geodesign. And so even if it doesn't have all the bells and whistles that you'd like to see in the most modern video game, it's perfect for what was needed for this approach, which is being able to interact with data and be able to interact with people.

Kendall Slaught...: And I think that's what speaks to a true mature designer, is being able to choose what's the most appropriate modality for the goals of our stakeholders or the faculty or the students and the IDs is what makes the most sense for this experience, not just what's the flashiest technology available.

Christine Moore:	Great point. Great point. So we kind of have an idea of how this core story ends for students. The major goal is hopefully it'll impact their interest and course of study within urban planning, but what's next for Geodesign?
Jonathan Davis:	So as you know, many of these students don't come from the school of Geographical Sciences and Urban Planning. They're from all over the school at ASU and many of them might not change degrees, they might not come into this school, but we want them to be aware of these processes, of these approach, of these methods, so that when they're going out in their own professional careers, whether it's business, whether it's real estate development, or they're doing environmental sciences, that they understand that there are ways to incorporate their profession in these approaches in designing for future sustainable resilient cities and communities.
	And in regards to the next step for Geodesign, we do have a practicum course that students can implement a geodesign workshop collaboratively with other students and get more of the applied side of the Geodesign learning methods as opposed to most of the theoretical that are introduced in the first course.
	Students learn to work together collaboratively, learn interdisciplinary approaches and one of the main themes within this course is to be able to have a heart, have a desire to make community-based decisions, to have greater equity in decision making in communities.
Christine Moore:	That's a wonderful outlook for the geodesign urban planning students. What about what's next for the immersive experience design team over at EdPlus?
Auryan Ratliff:	Yeah, so I will say even though the experience has been designed, developed, it's up and running in Canvas. Our work's not done yet on the workshop. We're actually entering into a post-launch research phase where we'll be conducting a post qualitative survey collecting information from the students. We're also going to be running a pre and post-attitudinal test to kind of assess what the students are learning from this type of experience. So as great as we all feel about the experience, we want to validate all of that with real data from real students. So really excited to enter into that research phase.
Christine Moore:	So outside of this particular course, how might other faculty who have been inspired by today's podcast, how might they go about getting in touch with you or starting to explore these types of experiences for their own courses?
Auryan Ratliff:	That's a great question, Christine. So we are absolutely looking for new ideas and existing experiences that want to be redesigned from IDs in faculty. If you have those ideas and you're looking to start this process, we are working on an official marketing form that you can use to submit those ideas. However, right now, your best course of action would be to email me, Auryan, at Auryan@asu.edu. That's spelled A-U-R-Y-A-N@asu.edu. And we can absolutely

get the ball rolling in terms of figuring out what the best course of action would be for building out those new immersive experiences.

Kendall Slaught...:   Yeah, we would absolutely love to hear from faculty or instructional designers because we obviously aren't subject matter experts on every course that ASU offers and so these really great experiences like Geodesign come from the spark of an idea from a faculty member, and they really know where the opportunities lie, so we would love to hear what other ideas are out there.

Auryan Ratliff: Also, nervous faculty, feel free to reach out through your instructional designers, and that is another great way to get in contact with us as well.

Christine Moore: Thank you everyone for being here today and sharing your ideas and your experiences with the workshop and the Geodesign and Urban Planning course. Before we head out, is there anything that you'd like to share with our listeners, maybe where they can find some of your work or something that's upcoming from the department?

Jonathan Davis: Absolutely. So if you're interested in Geodesign case studies and kind of the more in depth process, but don't want to necessarily take the course, Dr. Wentz and myself do have several publications, one from 2020 in Landscape and Urban Planning, and another in the Journal of the American Planning Association. We also have a Planning Magazine article that explore these case studies and the links to these articles will be provided below.

And also, there are many really exciting courses offered in the school of Geographical Sciences and Urban Planning, and we highly encourage you to check out what can fit within your degree path or pursuing a minor in one of our focus areas as well.

Auryan Ratliff: And if you're looking for entryway into those types of studies, the link for the workshop experience will be in the description below. So feel free to try that out and test your hand at an actual workshop experience.

Christine Moore: I think we too should give a little shout out to Dr. Elizabeth Wentz who is the vice provost and dean, and also a professor in the school of Geographical Sciences and Urban Planning. She was a big part of the inception of this project and a big part of Jonathan's work I'm sure. And we mentioned her a lot today, so we'll give a big shout out to, we know her as Libby. And so will the game players.

Auryan Ratliff: Yes.

Kendall Slaught...:   Absolutely.

Christine Moore: Libby appears in the experience.

Kendall Slaught...:   Yeah.

Auryan Ratliff: She's the star of the show.

Kendall Slaught...:   Absolutely.

Jonathan Davis: Played by...

Christine Moore: Yours, truly.

Ricardo Leon: All right. Let's wrap it up.

Mary Loder: Okay. Immersive design is awesome. It allows you to do lots of cool things.

Ricardo Leon: Well, first we got to go, "Wow, what a great conversation."

Mary Loder: The standard. Well, howdy. No, but truly, this is really cool. What a neat experience for not only our students, but also our design team, and for our instructors to have an opportunity to work with the immersive experience design team at EdPlus, I do hope that we see them create even more opportunities for this to occur in our ASU online courses, specifically astronomy, just saying, throwing it out there.

Ricardo Leon: I know that a lot of you listeners will be really excited about maybe applying this to your own course. And as Auryan shared his contact information, we'll also include that in the show notes for you to reach out to the team.

Mary Loder: And be aware that it takes a lot of planning.

Ricardo Leon: Absolutely.

Mary Loder: As all things do for the online courses.

Ricardo Leon: Absolutely. So make sure you have your instructional designer CC'd on that email.

Mary Loder: Ducks in a row. T's crossed. I's dotted. All of it.

Ricardo Leon: Mm-hmm. Here's the real question, Mary. Are we in a simulation?

Mary Loder: I think maybe, right? Is this it? I don't know. I guess we'll find out on the next episode. No, I'm just kidding.

Ricardo Leon: The stunning conclusion.

Mary Loder: Stay tuned. No, we won't find that out. We'll never find it out until we pass, but don't pass too soon. You're in the simulation for a reason.

Ricardo Leon: Because season's not over yet.

Mary Loder: We should probably not go deep.

Ricardo Leon: We got a few more of the episodes of this season.

Mary Loder: Oh.

Ricardo Leon: All right. Bye.

Mary Loder: Bye.

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Jonathan Davis: And there's a geography of wine course too.

Kendall Slaught...:   Oh. Do you guys, do you need an immersive experience for that?

Jonathan Davis: Fantastic.