Transcript

(Intro Music)

Ally

Welcome to the Digital Creator Podcast, the show where we spotlight students working on cool digital projects. I'm Ally, a consultant at the Digital Knowledge Center where we empower students to be digital creators. Today's guest translated her lifelong interest in paleontology into printing 3D dinosaur models based on her favorite video game.

Sam

Hi, my name is Sam Shuffleton. I am a freshman here. I am a geology major, and a biology minor and I'm set to graduate in 2027, but that may be earlier.

Ally

Awesome. Awesome. So why don't you tell us a little bit about the project that you're doing here with the DKC and like kind of how you got into that.

Sam

Yeah, so I print dinosaur models. I've always loved dinosaurs. That's why I'm going into geology so I can go into paleontology in grad school, and I've always loved to make things I've sculpted with clay for many years, and I decided I wanted to try digital sculpting because I had never tried it before. So, I gave it a try over the summer, and it was OK. It wasn't great, but then I got better at it and I said, "hmm, there's the digital knowledge center. They have a 3D printer. Let's try it." So, I tried printing one of my dinosaurs and it went really well. And I posted it on an Instagram. And I was like, "hey, these are my models" and people really liked them. And I really liked them. And I had a lot of fun with them. So, I started making more. I've made like 15 or 16 different digital models printed. Most of them, I opened an Etsy store and I've been selling them. And yes, I've just kind of been making dinosaurs in my free time and printing them here when I can. I also I got a 3D printer for Christmas, so I have one of my own now but.

Ally

Exciting

Sam

Yeah, it's really cool. So, I've been using this printer and the one at home both to get stuff out. But yeah, yeah.

Ally

Awesome. OK. So, could you walk us through your creative process? I know that you said that you love dinosaurs, is there like a specific order in which you decided to make them? Was it, you know, just like, what kind of inspired you through that and how did you come to make the the final product that you do?

Sam

yes, so I. So, these models that I'm making currently are based off of the designs from a video game. It's called **Paleo Pines,** wonderful game. It's like a **farming SIM game**. But with dinosaurs, it is incredible. As someone who has played **Stardew Valley** my whole life, it's everything wonderful game, but they post all the concept art which is drawn by a man named **Jordan Bradley** who is incredible. They post all of the reference art and I. Have struggled with finding my own style with making dinosaurs. I've made a bunch of them, but they've always been cute. Not quite realistic, with my clay models. Then when I decided to go digital, I was like I want to keep that kind of style. And Paleo Pines has a great idea and beautiful art style for that. So I based all my designs off of that. There's like 40 creatures in the game. Prehistoric creatures, and there's not really an order in which I decided to make them. I did start with an **ankylosaurus** because I was like, oh, he's cute, he's round, he's got his little bobble tail. Like, he'll be fun. So, I started making him, which took a long time the first time because I had never used. I used nomad sculpt to sculpt them, but I had never used the digital software before this. I've again used physical clay, but it's a little different. But it still has the same concepts of how you work the clay. It's just on a digital format. So I worked with that and it made him and then I put it into another software and I did the same process that 3D animators used to animate creatures for for a film, so it's like a rigging software. So, I rigged them up and then made a cute pose. And then I printed it and then pretty much from there, it's been like, oh, I really like the **styracosaurus**, let's make this one or and then it kind of just spirals into whatever I want to do next. And at this current point, because there's still a few left and. The **Discord Server** for Paleo Pines I've talked to a lot of people there who are interested in buying these models and they're like, "oh, have you made **Utah Raptor** yet?" I'm like, "no, I haven't, but I'll put that on my list of next because I know someone's interested in it when I get to it." So, it's kind of like a now. It's a list of, OK and this order someone. Requested it this. Order someone requested it, but really, it's just I like this dinosaur let's make him.

Ally

Yeah. So, I know that you mentioned that you have been selling them. Are there some that like are more popular than others to people like want one specific kind of dinosaur over another?

Sam

My, the **Tyrannosaurus Rex** model, no surprise, has been the most popular one. The Tyrannosaurus Rex, Ankylosaurus and Styracosaurus. Styracosaurus is basically a **triceratops,** just with one horn. So yeah, those three have been the most popular, but I've also been selling the actual files of the models because there's a market for that too and. It's been a wide variety of people that have bought different S they're called **STL files** for the different dinosaurs, not just the T Rex, has been a bunch of different ones that I've. Made, which has been really cool.

Ally

Do you have a favorite that you've made?

Sam

That's a great question, probably might it's called **Deinocheirus**. It's not a very well known dinosaur, but they look like a giant duck. Pretty much they're very cool. They're a big, big duck bill. Big hump on their back. They're really funky. I think mostly just cause I love the color schemes that I gave them. But I love all of them. There's some that I love less, but that comes down to that. Just comes down to I. Like this dinosaur more for like.

Ally

Because am I correct that you print them and then? You paint them?

Sam

Yes, I paint them with acrylic paint and do like top coating and all that

Ally

For the color schemes. Do you base that off of just like vibes?

Sam

It depends, I usually for my specific models that I paint for myself, I use the color schemes from the game because there's different colors. There's like each dinosaur in the game is like 7 or 8 or more different color patterns you can do. You can find in the game. And so I'll be like, oh, I play this game and I have this color. Styracosaurus I'm going to. Paint it like that. But on my store, I have an option for customization and usually people ask for the

dinosaur like specific color pattern from the game, but I've had a few where they're like, "hey, just paint it realistic" and I'm like, "I don't really know what color a T Rex is." We've got an idea, but it's kind of like I message them. I'm. Like, "hey, it's Just going to be brown" and they're like, "OK", well, I'll add some fun to it. So, it depends on what the customer wants, but usually for my specific. Things that I paint for the showcase of them because I make them for myself and then I'll take photos of them to put on the Etsy be like, hey, here's an example of they could look like I base it off of the games.

Ally

Awesome, that's so cool that you were able to find a game that is so

Sam

It's so nice...There's a as someone who loves video games and loves dinosaurs, there's actually a lot of dinosaur games. You just have to kind of. Find the right. Genre to find them and it's just turned into a lot of ohh there's a realistic looking game that I really like the designs for. I might try and do that someday, but yeah I've been I've been following this games development since it was announced 2019 I think.

Ally

Wow. That's commitment and obviously it worked out because what a wonderful creative outlet for you.

Sam

I love it.

Ally

Yes, I know you mentioned that you've always been crafty and enjoyed like making things. Where did that kind of start for you? Like, do you have a memory of like when you were first, like, oh, I should make that.

Sam

I painted a lot. I've I'd always painted. I never done real art classes, but I had always loved to paint as a kid other than just like a school art class. And then I think it was probably 2017 or 2018. I got some polymer clay and I was like I'm. Just going to try this. Let's see what it let's. See where it goes and I made it this big word called **shantungosaurus**. It's a big dinosaur. It's had it's a **herbivore**. And so I just made that out of clay and it looked pretty good. It's based off of another dinosaur game and I was like, oh, I could actually do this.

And it turned into I'm entirely self-taught. I've never done an actual art class. It started with the that type of with polymer clay, making things, painting them that I am. And I started doing some some kind of sewing. I made a few plushies with sewing and then I got into crochet and I've been crocheting a lot which is so much fun. I love crochet but really it's kind of just I have a mindset of that's not that bad. I can do it, I can learn it so. I can't really. Say "ohh this was an this is something that sparked the inspiration of creating things for me." It kind of just like, oh, that looks. Cool, I want it. I'm going to make it.

Ally

Yeah, that's awesome. I love that mindset. I think it's a great, great way to go about things

Sam

 challenging, but it's fun.

Ally

Yes, speaking of challenges during this process, do you have a specific moment you remember just, you know, like things that challenged you along the way of this process? Obviously, you are self-taught. So just talk like can you talk a little bit about that, and you know how you overcame those or pivoted or things like that?

Sam

There's been a lot of small issues, there's never been. I've never had anything that's been like, "Oh my God, this is the end. What do I do?" But it's been small issues with trying to figure out how to make the clay on the digital software work the way I want to with the T Rex, I have any of the carnivores really to do the teeth over the mouth when the mouth is shut. It's kind of hard to do. Especially because like in with physical clay, you can just make a little ball, put it on there and you've got a tooth on the side of the mouth. But if you don't have a physical ball of clay to add on there you have to push and pull. It's definitely hard, but it. It's fun to learn how to do it, and since I've started. I've gotten more. I've gotten better with learning how to do those kind of things and how to think. OK, it's different, but similar to what I know. So let me try something similar. That was one of the issues I wanted to. The other issue was just learning how to use software like I'm not the most tech savvy person, and if anyone has ever opened blender, you would know that it is. Terrifying. And so trying to learn how to use **Blender** to create a rigging software as well as use blender cause it has a way to fix models. Because if there's a if the Poly mesh gets mixed up in a model, it won't print well and you can use blender to remesh a model's internal structure which is hard to do. So learning how to. Figure that out and bring the key binds. Maybe I have a little note on my phone that's. Like do this do this. Do that to make a model. That was really hard trying

to figure out why is it not working. When I'm doing exactly what they want me to do, but so it's really. Just small things. But just more little steps in learning how to Do things, but yeah,

Ally

Yeah, that's super interesting about the software as well because I feel like that's what what stops people from trying new things is this sort of like looming tech intimidation. So, it's really great to hear that you were just kind of like I have to do it because I have to learn. So let's go and learn. It you know.

Sam

I've definitely like stopped. I mean, like I can't do this right now. We're done and I'll come back to it later. But.

Ally

Yeah, yeah, for sure. And I think that's the same with any project where, you know, sometimes you just need to take a break and taking a break sometimes is like the hardest thing to do.

Sam

Yes, Yeah, because all you can think about is I got to get back to doing it.

Ally

That's super great where where there are certain resources that you turned to during the process like was it YouTube University, was it, you know, did you have someone who was helping you out?

Sam

There's a few YouTube channels that I've looked at, it's really just all Google, like how to make a rig in blender and then I'll figure out all the videos. I can't name any specific. Channels cause I don't remember off top of my head, but yeah, I kind of just look it up. No real step by step guide kind of just been like look what does the Internet tell me to do and see what it says.

Ally

Yeah, yeah, I think it's super cool and like this age of YouTube. There's really, like videos on everything.

Sam

Yeah, there is

Ally

And you just got to know what. To look up and and where to look for.

Sam

Figure out the right words

Ally

What, for you, has been the most rewarding aspect of this project?

Sam

Two things come to mind. The first is just having the model in front of me because there was never good dinosaur models, in my opinion, as a kid looking for the right dinosaur toys, there were very few that actually did what I wanted them to do. So having the finished product, all the paint on seeing that I made that and it looks the way I want it to do is very rewarding. It makes me very happy. And the second part of that is when I share it and people really like it. The other day, I was talking to someone in one of my classes who I'd shown the models to and they were like, yeah, I told a bunch of my other friends about them, and they're really interested in. And I made like. It just fills my heart with so much joy. Not because I'm like, oh, they're gonna buy my models, but because someone looked at my art and was like, that is awesome. I want that. And that makes me very happy.

Ally

I know that you mentioned being in a discord for the video game. Have you found like community in doing this? Like obviously there's like a lot of people out there that love dinosaurs? And I feel like there has to be a cross section of people that love dinosaurs and people that love 3D Printing or art and things like that. Have you been able to kind of find that community through this project at all?

Sam

Yeah, a little bit. Because of discord rules, I can't actually post it in the discord in my store and advertise it in the discord because it's not technically an official licensed product, but I

did once and they were like you can't do. That and people were like, oh, but I love that. And so they're like, send me an e-mail when it's done. So I've talked to a few people and I've created a little bit of a community. I've created more of a community as just someone who loves Paleo Pines, and I have with the models themselves. But I've definitely made a few friends that are really cool and they're really interested, and I've worked back and forth with helping one of the people I've met make their own models because they were starting to do it too, and it's very cool.

Ally

Would you have any kind of advice for someone that is looking to get into this sort of project but doesn't know where to start or doesn't think they can do it? Like what would You say to them?

Sam

Use reference art. That has been the biggest thing that has helped me in learning how to. Get this better. Make references, even if you just draw them yourself, have something as a reference, especially if you use **Nomad Sculpt**. You can put the image behind your physical ball of quote unquote clay, and that helps so much with anatomy with how you want it to look. References are the biggest thing ever, but also just try it. It doesn't have to look perfect. I could pull up. I have two. Have an image of my first styracosaurus I made on digital software looks really bad and then a one that I made probably four months later after practicing it looks pretty freaking good so. Just practice and use reference art that helps so much. Because even if. I love dinosaurs so much, but I can't. Draw a whole T Rex straight from my memory with all the accurate details.

Ally

Right, right. Yeah, I know that you mentioned that you got a 3D printer for Christmas. First of all, that's so exciting.

Sam

So cool.

Ally

So, like, do you have any kind of plans going forward for this project? Like, is there anything that you are? Like looking forward to doing now that you maybe have more access than having to come into the DKC to use 3D printers?

Sam

Yeah, I well currently I'm. So, I'm selling at the night market, which I'm very excited about on March 14th. And so right now the printer is at home. I live about an hour and a half away. And so, my dad has been my like, "hey, dad, can you print another T Rex for me?" He's been wonderful. So right now, it's working on that and getting all of the dinosaurs that I wanted to be to sell at the market, to. People. But what I'm really interested in is I can make prints that are bigger. I can do different parts. I can make, because for here my schedule is so strict to the semester I can only print on Thursdays and that's a one hour one time block on a Thursday every week. So, I feel like, oh, I have so little time I have to do a dinosaur. But now that I have one at home too, I can do something else if I want to, like I've made a **trilobite** which is a little horseshoe crab looking thing into a little articulated fidget toy, and I love him. I wouldn't have done that because I'm like, I don't have enough enough time here to make things other than the dinosaurs that I need to make for promotion for myself, for someone that's paid me all that kind of stuff. Just kind of just allowing me to try other things besides dinosaurs, which has been really nice.

Ally

Yeah, that's super cool. And and for those where those just seeing just creatures that you kind of found out about through your research of dinosaurs through your love of paleontology?

Sam

The trilobite, I've known trilobite for a very long time. That one. Now that I have more time to print, I've been able to look at official databases of STL files, and I've found some things that are really cool. That those are the kind of things I've been printing more at home. It's just, oh, I downloaded this. I paid $2.00 for it. I like this person's model. I want to have one. Of my own but.

Ally

Yeah, yeah, that's so awesome. This is. This is one of my favorite projects that we have people doing here at the DKC. I think it's so creative and so personal to you. I think that's just so lovely.

Sam

Well, thank you.

Ally

OK. So, would you recommend that people come in and do a project at the DKC?

Sam

Absolutely! It's so fun. Everyone here is so very nice. And again, it's free. Like you can print a dinosaur for free. You can put anything you make. For free, all the software that I use to make all this stuff is free, so come here, make stuff. It's so much fun and yeah, you can be so creative. You just gotta try it!

Ally

Exactly. Everybody listen to Sam and stop by!

(outro music)

This has been the Digital Creator Podcast. You can find a transcript of our conversation and more about this project below. This podcast was produced and edited by me, Ally Hamilton, with help from the resources at the Digital Knowledge Center. Are you interested in becoming a digital creator? Do you have a cool project you want to share? Go to dkc.umw.edu for information on how to get started! Thank you for listening!

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