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 combined her robotic skills and love for sparkles to create a dynamic light installation in honor of the Hurley Convergence Center's 10th anniversary.

Evelyne: Hi, I'm Evelyn Breed, she/her. My major is English with a focus in creative writing, but I'm also pursuing secondary education licensure. And I'm planning to graduate in 2026.

Ally: So just to start off, can you just give us a brief overview of what your project is and kind of how you found yourself at the DKC working on this?

Evelyne: My project is putting an installation of lights that can light up in a bunch of different colors into the HCC around the area of the media wall. And we're doing that to celebrate the 10th anniversary of the HCC being built, but the way it turned out, it might be more permanent. We will have to see.

Ally: How did you get to the DKC for this specific event?

Evelyne: So, I absolutely love the DKC, and I've been coming for random things a lot when I just want to do crafts, or I have a school project. And I saw they were hiring for a fellowship, and I went to a STEM high school where I did robotics for about four years. And during that time, I learned how to program these individually addressable lights, and I used them in a lot of projects, including - I made a dress that could light up. And we programmed it to match the music in our spring musical.

Ally: Oh wow.

Evelyne: Yeah, with the Wi-Fi connectable chips. So that was really cool. And I reached out to Shannon and Cartland and sent them my documentation of that project and asked if I could do something similar. And Cartland had the idea of doing an install for the HCC's anniversary which I didn't even know was this year and it all went from there.

Ally: That's awesome. That's super cool. What musical was it?

Evelyne: It was Pippin the musical.

Ally: I love Pippin!

Evelyne: Oh my gosh, it was so fun.

Ally: That's awesome. But yeah, I love the blend of like STEM and creative projects. And I feel like that really is at the core of the DKC.

Evelyne: Yeah.

Ally: So, it's great that you really found that you liked it and then had this opportunity to do the fellowship. So, that's super cool. Can you walk us through your creative process and how you came up with the ideas for this? How much of it was you? How much of it was Shannon and Cartland telling you what they wanted? Was it collaborative? Like, just talk on that a little bit.

Evelyne: My creative process is normally go for it and fix the problems later.

Ally: Right on.

Evelyne: Which sometimes works and sometimes very much does not. In planning this project, we were really collaborative on it because it was a big install. And we wanted to make sure that we were really communicative about that, so that I didn't just show up and stick something on the wall and have Shannon and Cartland be like, “that's not what we were looking for.” So, we had a lot of discussions about what to do, how to sync it with the media wall. But the part that I've been in pretty much complete free reign over is the code for it. So, I've been designing and implementing all of the effects. And that we haven't really discussed and we're going to see how we can incorporate that with the media wall later this week before the anniversary on Friday. But, the lights themselves - originally I had planned to put them on the railings, but yesterday, when we were doing the installation, Cartland noticed that the light strips are pretty much the exact width of these little grooves running in the wall by the media wall. And he looked at me and was like, “crazy idea: What if we put these in here?”

Ally: That is cool.

Evelyne: It was super cool. I was like, “let's try it!” And both of us were like, “great!” So, he taped it on, and it worked. And so, we stuck them in with their adhesive backing. And now they're there. I don't know how we'll get them off.

Ally: That's a later problem.

Evelyne: That's a later problem. I'm planning to study abroad this spring, so that might not even be a me problem. I'm going to Australia.

Ally: Fun! Oh my gosh. Is it for English stuff, is it for tech stuff, or is it both?

Evelyne: I'm planning to take a creative writing class there with poetry, but it's mostly because I want to have an adventure in Australia. I'm also planning to take environmental science.

Ally: Yeah, I was going to ask about that because I feel like there is a lot of conservational stuff.

Evelyne: Yeah. It's going to be super fun because, I mean, if I have to take a lab science, I'm going to want to do it in Australia and learn about conservation and the Great Barrier Reef and koalas. It sounds amazing.

Ally: Yes. And if you go to the Australia Zoo, you might meet Robert Irwin.

Evelyne: That would be so cool.

Ally: So that's really great that when it came down to the coding of it all, you were allowed to, you know, kind of play around with that. I remember reading in your posts you would often include the code that you're doing, which I thought is super cool. And with that, like obviously with any kind of project, there are bumps in the road and I feel like for this one, there are a lot of moving parts from the actual coding to installation to sinking it. I know we were talking about that before we started recording a little bit about some issues with that. What for you was the biggest obstacle, or the most significant obstacle? How did you find your way around that?

Evelyne: I'm actually going to work on finding my way around the biggest obstacle later this afternoon. Because we did the install, we plugged it in, and I uploaded my code. And it started running beautifully and it gets to about a minute or two into the code on both the upper floor and the lower floor, because we did this on floor 2 and floor 3, and on both of them, it fritzes out and starts over again.

Ally: Oh.

Evelyne: And I know it's not the lights. I've run the lights before. I know it's not an issue with my code because I've scoured it with a fine-tooth comb. So, it's also not my wiring. I've double checked that. So, it's either issues with their boards, so Cartland has some new ones coming in the mail. And the other issue is it could be an issue of voltage, so I'm going to go try to play around with that later today and see if I can fix that because I was running the upper floor ones off of my computer last night and my computer power was able to power it enough to run it all. And so, I think it's just an issue with the fact that I have a - I specifically chose a 5 volt converter because both the lights and the chip that we have run off of five volts. And I have learned that you don't want to overload things because if you put too much voltage into an LED, sometimes it explodes.

Ally: And that would not be good at all.

Evelyne: It would not be good. I learned that my freshman year of high school and have always been super careful to not overload my voltage since. But I might have gone too much in the other direction. My calculations are probably off. I don't really like the math part of things. So, I am going to try to introduce a second form - a second voltage input so that there's enough to power everything. And if that works, then we'll be ready to go and golden. And if that doesn't work, I'll try switching out the boards.

Ally: Wonderful. Yeah so, I mean, literally like process. Like you have to kind of go through that and figure those things out.

Evelyne: Another fun tricky thing was trying to get more than one light strand together. They come with connectors that you can easily daisy chain, but we weren't quite sure how to make that look nice. Once we stuck it in the groove of the wall, we just let it be connected with those wires and Cartland stuck a piece of card stock over it. It looks great now. Nobody can tell. But before that, when we were thinking of putting it on the railing, it would be super visible if we had wires. So, I tried to solder them and my soldering skills - it's been a few years since I picked up a soldering iron, since I was in high school. And they're not quite up to par anymore. Not that I was ever much good at soldering. It's one of my weakest robotic skills. I can code, I can wire, I can't solder. And we decided after experiencing the difficulties of my soldering skills, that we were going to not do that.

Ally: Right. Kind of had to pivot.

Evelyne: We had to pivot, but our pivot was back to the original plan which was just use the wires that are already there. So, it worked out great.

Ally: Awesome, yeah. So, I know you mentioned a few times going to a STEM high school. When you went, did you go specifically for robotics or was it like something that you discovered a love for when you got there?

Evelyne: I really discovered a love for it once I got there. I went because I wanted to experience a challenge in different fields and I was really interested in the engineering fields they offered, but I originally actually went for their prototyping lab which was a super cool lab. And I did take prototyping classes as part of that experience. But I really discovered my love for robotics because of my robotics teacher. She was super interested in including creative projects and she was the one who allowed me to do that project for Pippin. And I really loved getting to have the intersection of creativity and STEM that I was able to do in the robotics classroom, whereas some of the other teachers wanted more STEM focused approaches to things. And my prototyping teacher was also very, very good

and very interested in letting me do random stuff, but then he left the school. And so, I went for robotics.

Ally: And that happens. And once again, we pivot to something equally as wonderful.

Evelyne: It was really - part of the process was really deciding which teacher I wanted to spend time with. And I chose that because of how they were willing to allow me to be creative within the process. So, I was really excited when I found the DKC because it's a place that really emphasizes and encourages that merger of creativity and art and STEM. And I think that's really important.

Ally: So, we touched on this a little bit too, what's like - if you had to have one take away from working on this project, what would you say that it has taught you or that you've learned through it?

Evelyne: I feel like I'm definitely learning about voltage. It's always a fun one. I'm definitely learning to rethink like visions because we went through several iterations of where to put the lights in general. Originally, when we started talking about the project last spring, the plan was to make like a set of panels on a wall.

Ally: OK.

Evelyne: Up by where the library entrance is. And now it is completely different and it's even better. But we had to go through several iterations of the creative process before I even started the project. Before I started blogging and we did this over e-mail, through discussions in the spring. But I really - I can be impulsive in the fact that when I have an idea, I just want to go do it. And learning to slow down in that creative vision helped us to achieve something even better than what I had originally hoped and planned for.

Ally: And I mean, it was even different up until yesterday when you actually got into the space and were trying to put things together and found a different way that ended up looking better, you know.

Evelyne: Yeah. It's really, really cool. I was testing it last night and some students saw. I had a little rainbow comic going around where it would like light up in the colors of the rainbow, and then it just like kind of went around. And I was testing it on the lower floor. And these kids just started chasing it in circles like little puppies chasing their tails. It was really funny. They were like, "Where's the rainbow going? Where's the rainbow going?" And I was so excited and happy that it's being something that's interactive with the space, that we can make it interactive with the media wall, and that students are already interested in it. It's really fun to me to see that they're starting to enjoy how it's incorporated into the space as a whole.

Ally: And what a great way to spread community for, you know, an anniversary. And then putting something in a public space that reminds people, you know, what the HCC really was created for which is for students to be able to have these opportunities to create things and have a space to study and work that's also like for them by them, you know, interactive in that way. That's really awesome, yeah. Similarly, what has been the most rewarding thing for you? Would it be - do you think it's that community aspect, the really seeing it in the space? Like, would you say like - something I often bring up in these interviews is what was more rewarding like the process of doing it or having the thing to point to or a combo of both?

Evelyne: I think I have two things that are most rewarding. One of them is definitely seeing it in the space. Not because I want to necessarily show it off and point it out and be like, "look I did that. I'm so great", but just because I love sparkles. And having more sparkles in my life makes me happier. Especially colorful rainbow sparkles. So just having colorful rainbow sparkles on the wall and being able to decide, oh, I want it to be like this colorful rainbow sparkle makes me so happy.

Ally: And the HCC is kind of like a blank canvas in a lot of ways. The kind of like modern design of it all that has all these spaces that really could use more sparkles if we're thinking about it.

Evelyne: Yeah. It's just a big tan wall.

Ally: And what do you do to a big tan wall? You put sparkles on it!

Evelyne: You put sparkles on it. It makes me happy. And the other thing that I found is super rewarding is getting to interact more with Shannon and Cartland. They are just so kind and so funny and so wonderful. And they've been super supportive through this whole thing. And I really enjoy getting to know them better. It is a joy.

Ally: They really have mastered how to interact with students where you really give them the space to pitch what they want to do and then they will sort of help you make it real. So yeah, I think, I mean not that I'm biased or anything, but to hype up the DKC really is my true goal in life. I think it's really underutilized.

Evelyne: It is.

Ally: I'm hoping that is turning around. We see more and more people come in, but there are so many times where I've talked with seniors and I say that I work here and I tell them what we have and they're like, "why didn't I know that this existed?" I'm like, "I don't know. Why didn't you?" Like, come on over! Like, it's never too late, you know? And there's so many things you can take with you as well.

Evelyne: At first, when I heard about it as a freshman, I was like, “oh yeah. It's a digital studio, I guess”. And then we visited as part of my FSEM. And the minute I walked into the space, I actually, I didn't know that there were robotics things here, but I walked in, and I saw the soldering irons and I was like, I love it here. I'm going to be here forever and you're going to have to put up with me.

Ally: You're going to see me here again?

Evelyne: Yep. And now Shannon gives me hugs. It's great.

Ally: Yeah, those FSEM tours really are wonderful. I often end up doing the tours through. And so, my favorite part is always when I bring up different things and I see the reactions of people where like every once in a while when I mention that we have sewing machines, someone's face lights up.

Evelyne: Yeah.

Ally: And I'm like, and that's why do it. That’s why I love working here.

Evelyne: Yeah, I love the joy that the creative process can bring to people. I really love that we have these spaces on campus that can teach people how to do things and bring people joy. And I hope that both grow in how they're utilized.

Ally: Have you always wanted to be a teacher or pursue secondary education? Was that something that kind of happened over the years?

Evelyne: It's a good question. It's a combination. My dream is to be an author. I want to write books for a living and I currently have a manuscript that I wrote this summer. That's like, I think, 75,000 words. It's a full novel and I'm working on editing it and I want to publish it someday. The reality of being a writer is that unless you make it huge, chances are you're going to need some other job to support yourself. And so, I started looking for other ways to get food and rent money because I like food, especially my peanut butter. And I had a really wonderful mentor at my home church. I did Children's ministry there for seven years as a volunteer. And she really encouraged me to pursue education because she thought I was good at it and because I really like kids. I really enjoy being around kids. And being a high school English teacher seems like a convergence of my love for telling stories and my love for encouraging youth to be better versions of themselves. And it also gives me summer break which I can use to write stories.

Ally: So, I know we just sang it's praises, so I won’t. I could probably go on for a lot longer, but our question that we like to close out with is, would you recommend that someone participate in a fellowship with the DKC?

Evelyne: A million bajillion percent. Yes, yes, yes. If you have even the slightest idea of anything you would like to do, come here and try it out. Even if you don't want to take all the responsibility of a full fellowship, just come and play. It is so fun and the fellowships are super supportive and you get to just make things wonderful. And you get to spend time doing what you love.

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Ally: 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.

(Outro music fades back in)