

Careers in Green Chemistry and Sustainable Design

Amanda Close – Education and Outreach Manager, Waste Loop

[00:00:00] So my name is Amanda Close and I'm the Education and Outreach Manager at Waste Loop. Waste Loop is a local non-profit based in Leavenworth that works with the community to integrate strategies on waste reduction. And so, I've been working with Waste Loop about two and a half years in this role, but have worked in sustainability and science education for about a decade.

[00:00:29] In my role, I get to work directly with community members, community partners, businesses, schools, and classrooms, and work to plan events, develop curriculum, integrate sustainability strategies into just kind of everyday operations, whether it's, you know, integrating recycling or composting at, you know, a middle or high school or whether it's helping a restaurant reduce their food waste, or planning a community-wide event like Earth Day Fair.

What is a Repair Café?

[00:01:05] So the Repair Café is actually a global movement. I believe it started in the Netherlands about 20 or so years ago and has kind of trickled out over the years from Europe into the U. S. and other countries. Here in North Central Washington, we are hosting monthly events where community members can bring items in their household that are broken, malfunctioning, and they don't maybe have the skills or the time to invest in fixing that item, but we've recruited a whole range of volunteers in the community that have these skills, and we bring these people together at a community event called a Repair Café.

[00:01:42] And the whole idea is to build community, share skills, and then actually fix the items that we can fix and then put them back into use so that community members don't have to buy something new, conserve resources, and prevent waste from going into the landfill that can be reused and repaired.

How do you track the impact of Repair Cafes?

[00:02:06] We try and collect data at every event, and we collect the number of items that come in and then conversely the number of items that leave fixed. And so, we kind of are able to calculate a percentage success rate, and we've been landing between 75 and 80 percent of items fixed on the spot, which is really exciting. We also weigh every item when they come in, so we can get a

total weight of waste materials that may have otherwise ended up at the landfill, but instead are kept in use through repair.

What does sustainability mean to you?

[00:02:45] I feel like sustainability is kind of a buzzword we're all hearing these days. And I think to me, it means being more intentional about our actions and our choices. And so, thinking about not just what we need or what we want, but what the planet needs, what the community needs, and making choices related to how we live, what resources we consume, in such a way that we're thinking a little bit more big picture and holistically about the whole system.

How can we be more holistic in our sustainability practices?

[00:03:23] So I think everyone kind of knows, or a lot of people know, the three R's: reduce, reuse, recycle. And for a lot of people, they cling to recycling as like this is an action that I can do fairly easily in my home. But I also want people to view waste a bit more big picture holistically -- and recycling is great, but it should be the last thing.

[00:03:46] And so looking further upstream and thinking about how you could reduce what you're using, the resources, the items that you're purchasing, and then reusing what you already have. And that's where kind of repair and like our mission here at Eastside Rebuild comes into play and trying to be creative with that.

Does the sustainable design process include repairability?

[00:04:12] When thinking about repairability and the design process, a lot of manufacturers these days are unfortunately producing goods that are designed to not be repairable, and that is a process called planned obsolescence. They want consumers to purchase another product, whether it's a laptop or a coffee maker.

[00:04:35] Some of these goods actually have a timeline attached to their life. So that in one or two or three years, a certain very critical part will malfunction and there's no way to fix it. Because maybe the part is confidential and you can't order a new one or the parts are glued together. So, they're not able to be taken apart.

[00:04:59] When thinking about sustainable design, I think one of the really innovative, but also obvious, things that designers could start doing is design for repairability for modularity. So basically having an item that you can take a

piece out or replace a malfunctioning aspect, but then you don't have to replace the entire thing. And also being able to have the repair guides freely available, open source, online, as well as being able to buy all of these replacement parts so that someone, a consumer, can fix their broken item at home.

Are manufacturers thinking about circular economy and repairability?

[00:05:42] Yeah, there are some movements, specifically the right to repair movement is something that is gaining traction. Actually in Europe, Europe is kind of ahead of the curve in a lot of ways in terms of circular economy than the U. S. And so over in Europe, items, you know, need to be produced in a way that they can be repairable and manufacturers are legally obligated to provide those instruction manuals, those spare parts.

[00:06:10] And actually I think it's in France that every item receives a repairability score and it has to be actually branded on the packaging so that consumers know. Is this repairable? Is this a 10 of 10, super easy to repair? Or is this a two? And I think that that number is actually influencing consumer choice because if you are buying a product labeled a 10 -- super repairable -- you can buy X, Y, and Z, you know, at your local store, here's the instructions for you to fix it yourself, then you're going to get a lot more life out of that product versus something rated at, you know, a two-star where you may or may not be able to find those spare parts, you may or may not be able to find instruction manuals.

What is your favorite part of the work you're doing?

[00:07:00] I think my favorite part of the work that I'm doing with Waste Loop is getting to connect people in the community, whether that's helping, you know, a maker or a creative person who wants to teach a class on natural dye or basket making using salvaged materials and connecting them with a business that I know in town that has a space that they could utilize and then using the Waste Loop Network to draw in an audience of folks that are interested in learning that skill, and just kind of playing that little bit behind-the-scenes community building, bringing people together.

What skills helped you succeed in your career?

[00:07:45] In experiential ed and outdoor ed, like the leadership opportunities, communication, kind of risk management, decision making, that just all transfers pretty much to life, to every career. So working and developing partnerships, in particular, in my current job, I can definitely trace like some

communication skills that I gained while working in outdoor ed to helping build bridges and work with other organizations.

What advice do you have for students?

[00:08:17] This field is only going to grow and we need new ideas and insights and creativity from people of your generation. I think don't be afraid to share ideas, other ways of thinking about some of these complex problems.