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Designing for Humanity

Episode 5: Blockchain, escape rooms, and small experiments - designing for equity in education, with Laura McBain

Laura McBain: [00:00:00] How can I change adult learning if I'm the classroom teacher? How do I change the way my desks are arranged? Or if I'm a student, how are the ways that I show up? And so we've been playing with educators and students thinking about what are the small grain experiments that you can make within your classroom, your school, that are going to slowly advance you more toward your aspiration?

[Music]

Rie Nørregaard: [00:00:27] This is Designing for Humanity, a podcast by SYPartners about designing a future that's made for all of us, and the best in us. I'm Rie Nørregaard and I'm talking with some of the most interesting people I know about how we, as designers, can tackle the most complex challenges our society faces right now. How can we use design to reimagine the ways we interact with each other and with the world? I'm here to start the conversation about what new ways of thinking and methods are needed.

Rie Nørregaard: [00:01:03] Today I'm here with Laura McBain, who's the co-director of the K12 Lab at the Stanford d.school. I've been really interested in the labs for a while, and the work that they're doing there to disrupt inequity in education by experimenting with new design models. Prior to joining the d.school, Laura helped found High Tech High, a nonprofit charter aimed at applying design thinking to primary and secondary education. Laura's been a teacher, a principal, and a coach, and she's spent the last 10 years thinking about how people connect in the world. I'm really excited to explore Laura's ideas around redesigning education with all of you today.

[00:01:39] Welcome. So glad you could make it here. I'm going to start asking you if you see yourself as a designer. I know you use design tools, but do you perceive yourself as a designer?

Laura McBain: [00:01:57] I'm starting to. I started out as a teacher in a comprehensive school down in the South Bay of San Diego. Then I became a principal. I worked at a charter school. And then I found myself in adult learning, helping teachers and leaders think about how they restructure

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schools and systems and classrooms to help kids to really think about how they might design for more equitable systems in schools.

[00:02:22] And so when I went from oh, I design classroom lesson plans. I design classroom experiences. Then I got into, what does it mean to really think about designing a system around education? And I will say that I awkwardly and sheepishly still use the term 'designer' because I'm still figuring it out. A lot of my friends who are teachers, they say about themselves, I'm just a teacher. I'm just a principal. They use that 'just' as an adjective, and I feel like through my work and my experiences, I've had these opportunities to create something new, which is the process of design—iteration, adaptation, adoption, creation. And so I use that term now partly because I want to own it more, but then also I think there's something about what does it mean for teachers to call themselves designers? And for principals to call themselves designers? Because there's something about liberation and agency and power in that. That you say, I am designing this, which means I actually have some power over how this is going to go.

Rie Nørregaard: [00:03:33] That's fascinating. It's great to hear and I absolutely agree with you. So tell us a little bit about the work that you're doing at the K12 Lab. What's the type of work that you're doing and who are you working with?

Laura McBain: [00:03:45] So the K12 Lab at the Stanford d.school is really a place about modeling and cultivating experiments to unleash creative confidence in educators. It's for them to reimagine education to ensure that students who are furthest from opportunity receive the best resources. How do we close the opportunity gaps for kids? We use a lot of different experiences and experiments to try to figure that out.

So our work spans a lot of different things. We run a program called School Retool, which has about 23 cohorts around the country of principals who are slowly designing experiments within their school settings to reimagine education to advance closer to equity and equitable schools. We also train people to discover design thinking: What is design thinking and how does it work? And currently, we have about 60 people at the Stanford d.school who are learning about what it means to become a designer. And then we also have different types of experiences with schools around the country and the world who are trying to think about how they can use design to reimagine how their schools function and really, how they might help their teachers create the mindsets and behaviors of designers.

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[00:05:05] We want teachers to be able to do something on Monday to start becoming a designer. As Maxine Greene says, we're always in the process of becoming. Then we also want to play in this other systems-level space. Education hasn't changed for one hundred years. It's an industrial system. We have to change it. And so we're playing in new experiments around funding models, testing, leadership, machine learning. What are the areas that we want to experiment on that are really around the purpose of education? How do we impact the system the most to really think about what the new purpose and what the future purpose of education will be and continue to be in the future?

Rie Nørregaard: [00:05:45] I love that. Are you thinking about educators or children here, or both? Do you look at it from both sides in your work?

Laura McBain: [00:05:52] Both sides. I think sometimes we think that the learning that educators need is different from the learning that students need. I've always thought that we should be doing the same type of learning experiences that we do with adults as we do with students. Obviously content might be different and there's some scaffolding that changes, but we really should be modeling the type of learning experiences that we aspire to see in classrooms with the adults that we're working with. If I'm teaching folks how to use design thinking in their classrooms and they want to do that with their students, they probably should experience it themselves so that they can actually internalize the process and be able to really facilitate it with their students. As opposed to, 'Read it up on the website. Now go do it!' That's not a process for learning. So, how do we make adult learning experiential or otherwise model the practices we want to see in schools?

Rie Nørregaard: [00:06:42] And is one of the ways to do this designing with children, rather than for them? Do you also do that in your process at the d.school?

Laura McBain: [00:06:50] Absolutely. I think in any design you want to be designing with. I think in any content area we're always designing with folks, not for folks. So that is always a fun process.

Rie Nørregaard: [00:07:00] Give me an example. What does that look like when you're designing with children?

Laura McBain: [00:07:04] One of my favorite examples was actually when I was working at High Tech High. We had an elementary school that we built in a kind of valley. And so when the school

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opened, the property had a lot of fun creatures that had been displaced because when you build new buildings, there might be some rats or mice or creatures who lived there. And so in this particular school, when they did this, they were having a lot of mice and rodents that were coming into the school. So it became this design challenge of: how might we actually protect our classroom and how might we create a space where rodents are not coming into the classroom? So they [the students] did research. They had a challenge, which actually felt real to them because they were seeing rodent droppings in their classroom and this was no good. They ended up creating owl boxes because they discovered through their research and prototyping that owls are a great predator for mice. So they built that, young students did that. That one I love because it's so tangible and it's accessible for young students. And they just did it!

Rie Nørregaard: [00:08:07] So I am going to go back to asking you about your work at the d.school and the K12 Lab that you're in. What does a day look like for you — a day in the life? A Monday or a Tuesday?

Laura McBain: [00:08:23] Well one thing, every day is very different. This past week what we did on Monday was we mapped out the educational system. So we took a massive white board and given our knowledge and other things that we know about the field we thought, what's happening in the educational ecosystem? And then, from there, we thought about, what are the big challenges facing the education system? What are the topics that people aren't researching yet? What would we want to focus on?

Rie Nørregaard: [00:08:50] And what are some of the things that we're not thinking about, or that the design education community isn't thinking about?

Laura McBain: [00:08:58] A couple of areas we're playing with right now are artificial intelligence, machine learning. How do those impact the way schools function? One of the questions we brought up this past week is blockchain. Can we change the currency that's valid in schools using blockchain? Can we do it particularly around documenting the experiences that students have in and outside of school? How does that change what a transcript looks like? It's happening. We know kids are having these experiences, yet they don't get documented the way the current system is designed. So, what would that do?

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[00:09:28] And then we're looking at, how do we really reimagine assessment? So one of the experiments we have been working on more recently is looking at creative and collaborative problem solving. Currently in education we have the Common Core. We've got these big state tests. And while I think some of them are advancing in their application of content, they don't often measure the skills that really matter most. These are: How do we communicate? How do we solve complex problems with others? How do we apply creative thinking?

[00:10:01] So we did a wild experimentation process. We got really interested in escape rooms so we went to a couple of them. A lot of us on my team, we are kind of super nerds and so we went to see these escape rooms. And if you don't know about these escape rooms and puzzle rooms, you get about 50 minutes to an hour to solve a series of maybe linear or non-linear puzzles in a collaborative way. And so we found it intriguing and fascinating that when you walked into these rooms you have this short amount of time where you really have to rely on other people in that room to solve the problem. So we got really excited. We ran some conference workshops and then we took a 1997 Frito-Lay truck and turned it into a mobile escape room. We call it Puzzle Bus. And now we're taking it to schools for teachers and students to experience this. Then what we're creating currently is a set of toolkits around how they might really understand collaborative problem solving when students are working in teams. So we're trying to take a different approach to what collaboration looks like — which is very fun — but also trying to put something new into the field as opposed to a group evaluation or a test or a rubric. Because there is some research that we know from design teams that we're applying. Teams that are constructed with multiple people from different perspectives are great. We know that teams that are cohesive and use deep reasoning are really productive design teams. So how does that theory apply to group work in schools? And so we've been trying to test out those concepts using these escape rooms for schools.

Rie Nørregaard: [00:11:40] But there's another element in that design, which is the experience and the messaging around using a narrative in a language—the picture, quite frankly, of a bus and an escape room, which is something that's exciting and that is in the vernacular, in entertainment, to make that connection immediate—and that's another aspect of design.

[00:12:03] It's how you tell the story and how you get people to connect emotionally. And I think that's great. It makes me think of this idea of education as a very big system unto itself. And then, the ability to create experiments and change on a classroom level and how we feel disempowered and then how hard it is to think about a total system.

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[00:12:30] And to your point of, 'I am just my role, I don't conceive of myself as someone that can think outside of my silo necessarily', but if I'm someone whose job it is to do that, then I will see myself differently and I will act differently. How do you manage thinking about the system of education and making really tangible ways for teachers and students in classrooms [to do this] at the same time?

Laura McBain: [00:12:56] I think that if we back up, we think about the system of education and I think it often feels like this big aircraft carrier. 'I can't move it.' Because it's all this massive juggernaut. What we've been trying to work on with educators and students and superintendents and principals is: What is within their locus of control? Because they may not be able to change the funding process, although you can. But what are the levers that they can play on within their structure, within their locus? Whether it's a principal: How can I change adult learning? If I'm a classroom teacher, how do I change the way my desks are arranged? Or if I'm a student, how are the ways that I show up? And so we've been playing with educators and students thinking about what are the small grain experiments that you can make within your classroom, your school, that are going to slowly advance you more toward your aspiration? Because once you start doing that the change process is not something I'm initiating, it becomes a collective aspiration that we get to do. And then you start getting other people involved where it becomes a shared vision of change. It's as opposed to, we're all doing this new initiative starting next year and you must do this! As opposed to saying, hey, I've got this experiment I want to run around implementing curation in schools. I want to show student work all over the walls. Does someone want to take just this hallway with me and play in that space?'

Rie Nørregaard: [00:14:27] It's not a mandate. It's not a charge. It's not one extra thing that I have to do. So, you talk about understanding and creating strategies for dealing with inequity in education. What does that look like on a classroom level?

Laura McBain: [00:14:44] So there's two things that I think are kind of fun and ways to get started. I think about who has voice in the classroom. So how are you making sure that every kid is heard each day in your classroom? When thinking about inequities, we think about system inequities, which are true and real and they are there and we can't ignore them. But as a teacher, I can make sure that I can hear their voices everyday or I can hear their thinking. So how are the ways in which I'm

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encouraging voice in my classroom through small pair shares, through small instructional practices that elevate voice in the classroom?

The other one that I think is pretty powerful is we've been playing with an experiment which was found two years ago now. It's called Shadow a Student. This encourages educators to take the day and walk in the shoes of a student. It is definitely an equity exercise because you learn what inequities are in your school. That one has been really fascinating because educators and teachers get to know what it feels like to be a student today. And the insights that they bring back are fascinating, not just for how school is functioning, but for how are students being treated. There was a teacher in one of our cohorts, she was playing with a child and that child was never spoken to that day. For an entire day. All right. So what's happening there? Or there was a student who felt ostracized or didn't get to go to the bathroom all day.

[00:16:09] Where do they sit at lunchtime? It actually reveals the inequities that occur within classrooms because if a student isn't spoken to all day I have no idea how you reach that student. Then I have my design challenge.

Rie Nørregaard: [00:16:21] So really not delegating understanding.

[00:16:24] I'm sure there are so many more examples where we assume our role in this system. Our assumptions are not really matching the reality of the people around us, especially children whose perspective and purview is naturally quite different. So it's an awesome example of that.

Laura McBain: [00:16:42] You know we also spend time thinking about what does safe space look like in schools given the current climate we're in? I mean we did a brainstorm yesterday: What does it look like for schools to be safe places for students to show up? We have lockdown drills across every school. It's a real challenge and yet we also know that we may or may not have the capacity to change some of the policy levels at the national and federal level. But how do we ensure that students are seen and heard and what are the ways in which we can find the kids who are struggling the most and support them in schools? And so there's lots of ways that we can play within this space, you know, there are students that show signs. Oftentimes these are left in files. We don't know this information. Can we digitize this information? Can we ensure that students have another adult to talk to? And so we have some predictors about gun violence in schools. We know this. There is stuff out

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there. And so how can we redesign the system so that we can help the students who need it most so that these tragedies don't have to happen?

Rie Nørregaard: [00:17:49] And so the way that you're talking about it, there could be both a technology solution and then there is a human connection. Is there also a spatial solution? I imagine so. I mean that's where my mind goes—how do we design environments where people can actually see each other better and understand what's going on just on that level of presence?

Laura McBain: [00:18:12] Absolutely. I mean you can figure out how you can reconvene space in schools for people to find that. I did some work in Chicago for a long time and we reimagined the entryway.

Rie Nørregaard: [00:18:22] Tell me about that.

Laura McBain: [00:18:27] Students coming in to school have to go through the security detector and have people go through their backpacks. And I thought, you know, going into that school like, wow, it feels like a prison. It feels like why do I need to do this? And so what are the ways that we can reimagine the space? And there were subtle things we did. Let's paint this space. There are certain requirements we can't get rid of. There has to be a detector. I mean that is just what the law in that district was. But we can ensure that the person who is actually doing that work knows every single kid by name and welcomes them and talks to them and gets a flag of wow, this kid's having a bad day. What's going on here? And those are subtle. Those are small things. But just even one interaction of a student that's coming in, not because we need to check their backpack, but because they're showing up and they're showing up with a desolate look on their face. That's the human connection. I think just redesigning how students enter into the building and who they interact first with and having that person who's aware enough to know this person is having a bad day. I mean just like I told you earlier about that child that wasn't spoken to. That happens in many schools. And yet maybe there's some potential and again these are the experiments we want to continue to run. But is there some potential about how students enter into school and who greets them and who sees them and how they're feeling? Is that a lever to really think about school safety? I'm not sure, but I think those are the questions we all want to keep wrestling with and experiment on. And what can we learn?

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Rie Nørregaard: [00:20:03] It feels really actionable. I mean at least the experiment, right? It's like you could really try and understand and you could see if that could work. That's a really powerful example.

[00:20:20] When we talk about the challenges that you're trying to solve, they are massive. How do you remain positive? What's your design process for that? I mean when I talk to designers we talk a lot about how design is an act of service and you have to be optimistic somehow because you have to believe that things are changeable and that you can take a part of that. Do you consider yourself an optimistic designer in your practice or an optimistic person?

Laura McBain: [00:20:52] Definitely. I think all of my friends would say, 'You're super positive.' That's definitely a trait that I carry with me.

[00:20:54] So we had this conversation. We did our cartography two days ago. We were mapping the system and we had a conversation yesterday and we talked just about this question and we looked at the wall and we were like, wow there's a lot of big problems here! And it can feel overwhelming. We had these islands that we created and what does this look like. And I advocated. I said on every single one of these islands that we created on this wall, there is someone doing great work. There is a school board member. There is a teacher. There's a parent. There is a principal that is doing the work that we want other schools and others to not only replicate but aspire to. There are bright spots across education.

[00:21:35] I get renewed when I see people taking on the challenges. Once they've learned something and they go back and do it and then they come back and tell you. And you're like, oh cool! You know, that's how you get renewed. Because you see that it's given them their own agency and they're trying and then they replicate it and then it ripples across. It's this whole conundrum of cyclical empathy, positivity that comes back to you. When you see people using the process in such a powerful way and then you realize. That's when you know. And as designers we know — it's not about the tech. It's not about all this stuff. It's about the people doing it. And so one thing I want to do as we go forward in the Lab is how do we document those stories and how do we showcase those stories. Because once you start doing that then there is a whole body of people that just step up and say, oh they did that. They look kind of like me. They did something. I'm kind of interested and now I can do that. And so yeah, I think that positivity has a ripple effect. Because if you inspire someone else and they inspire somebody else, it comes back to you.

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Rie Nørregaard: [00:22:38] Yeah, aspiration in action. Thank you for that! I feel hopeful now. Thank you for coming today. It was so good to talk to you. It was an honor.

Laura McBain: [00:22:43] Thanks so much for having me.

Rie Nørregaard: [00:22:47] Absolutely.