

# TRANSCRIPT

## Learning Unboxed



Episode Bonus:

Steve Heath

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### **Annalies Corbin:**

Welcome to the July edition of Learning Unboxed. Similar to previous years, we typically take the month of July off. However, we know our listeners enjoy engaging with Learning Unboxed during the summer break. This next four weeks, we will explore four featured learning sites, who are part of the Education Reimagined Ecosystem Lab. We will travel to Fab Newport, we will give a listen to Rock Tree Sky, we will experience the Norris School District, and we will have big conversations with Big Thought in Dallas, Texas. Education Reimagined's mission is to make learner-centered education available to every child in the United States, inclusive of race, background and circumstance. Tune in to discover how each learning site uniquely fosters learner-centered experiences for their students.

### **Steve Heath:**

To us, the school can see the changes and we can communicate it to the larger community. And on top of all that, the hypothesis is that we will see those traditional four metrics also improve. So, that's my kind of dream scenarios that we see so much growth that it becomes obvious that we need to do more of this.

### **Annalies Corbin:**

Welcome to Learning Unboxed, a conversation about teaching, learning, and the future of work. I'm your host and Chief Goddess of the PAST Foundation, Annalies Corbin.

We know the current model for education is obsolete. It was designed to create fleets of assembly line workers, not the thinkers and problem solvers needed today. We've seen the innovations that are possible within education, and it's our goal to leave the box behind and reimagine what education can look like in your own backyard.

Welcome to today's episode of Learning Unboxed. As always, I'm excited to talk with another great innovator in the transformative education space. And today, we're going to be talking about fab labs and the whole idea of fabrication and making as a positive disruptor in how we think about what is learning and what can our futures hold.

And so, joining us today is Steve Heath, who is the Executive Director and Co-Founder of FabNewport. So, Steve, welcome to Learning Unboxed.

**Steve Heath:**

Thank you, Annalies. It's a pleasure to be here. I look forward to our conversation.

**Annalies Corbin:**

Absolutely. And so, just to set a little bit of context for our listeners who come to us from all over the world, FabNewport provides underserved youth with the opportunity to learn how to code, sew, design, prototype, run CNC machines, and imagine new possibilities. And in the ten years, you've served more than 20,000 middle and high school students, maintain long term relationships with three school districts, and trained hundreds of educators to be better engaged in school for multiple years. You've also inspired your learners to stay with their programs, which now include summer camp, I know you do afterschool, team manufacturing, internships, so many things that are going on there.

And so, I'm really excited to be able to dig into all of that. So, Steve, let's start with the sort of a hundred thousand foot view. I was joking with you before we started the recording that, you know, it's always fun to talk to a founder. When I get the chance to talk to the founders, I always want to ask what were you thinking.

**Steve Heath:**

Well, I'll try to just paint the whole story really quickly. I never had any plans to be a teacher or an educator, but I was living in Boston working for Greenpeace and I was curious about the schools because I was wondering if they were really as bad as I was reading about in the newspaper. And then, I also didn't know any kids in my neighborhood so I felt like, "Hmm. All right." In my little ideal world, we should all be connected. So, I grabbed that little red book down at city hall and they started calling me early in the morning and I was going to schools as a substitute all over Boston.

And then, Mr. Bevilacqua at the Lewis Middle School in Roxbury said, "Steve, can you come back here every day?" And I said, "Yeah. I could do that." It was a bicycle ride from my home and at the same time I was volunteering at a bicycle shop down the street. The next thing I knew, I was riding bicycles all over Boston with kids in my neighborhood. I said, "Hey, the kids are all right, but the schools need help." So, I keep rolling the clock forward working in schools in Boston, schools in Chicago, moved to Rhode Island. And I ended up working at a big picture school, East Bay Met School at Newport, where I became the internship coordinator and kind of a little startup guy.

And I took some kids to a fab lab in Providence, some of my high school kids. And I had some experience teaching coding and stuff, you know, Seymour Pappert, the MIT media lab, using logo. And I thought like, "Wow. That is super cool." It aligned with

Maria Montessori's vision. I had worked in a large Montessori school in Chicago. I go, "All right. Now, I'm getting an idea of what good learning looks like." And so, I saw these kids light up at the laser cutter and thinking about what we could do. So, I said, we need one of these in our school, so I wrote a grant and got a little money. And then, two years later, we're training teachers on how to code, you got the 3D printer, the maker bots out there, and one thing is leading to the next.

So, we've got this STEM/STEAM operation going, hence FabNewport Fabrication, we are technically speaking a fab lab. But then, I realized in the summertime, the kids in our neighborhood in the north end of Newport - everybody thinks Newport is all mansions and gas lit lamps and big time parties and stuff, but it's actually one of the poorer cities in all of Rhode Island - these kids who live within miles of the beach and the bay hadn't done that sort of stuff, things that I was able to enjoy here in Rhode Island. So, we just started riding our bicycles around and it went from 10 to 20, to now we have 100 kids in our summer program who are surfing, sailing, playing golf, hiking, doing environmental science, still doing stuff in the lab.

And we just keep going and so kind of landed on the idea that we've got to get our middle school kids out into the world exposed to what's possible. Because if they haven't been there, how are they ever going to know what's possible? And then, as they get a little bit older, they start dialing into things. And we hire a lot of our teenagers, 14 plus year olds, as interns. And what we've seen in our ten years where our kids thrive is when we have a fifth grader who's still with us in 10th, 11th, or 12th grade, is we're able to offer that set of long term relationships, help them identify their interests, connect them to others in the community that build their social capital. And it's really cool for the team to know these kids for so long, to get to know their families.

And we had a group in from Hartford a couple weeks ago and it was a few kids who they're trying to start something in Hartford that's similar to what we're doing. And one of the kids from Hartford goes like, "Well, why do you guys keep coming back here?" And Lacey goes, "Because it feels like family." And I'm like welling up when I hear that. It doesn't get any better than that.

**Annalies Corbin:**

It is. It's true. I completely agree with you. We have very similar experience at the PAST Innovation Lab. And, you know, we have kids who start coming to our program in second and third grade and they stick with us all the way through high school. And some even come back when they're in college to lead summer programs or after school things. And you're absolutely right, it is the most amazing thing ever. And at the end of the day, when you talk to those kids - and I'm sure it's the same for you - the

breadth and depth of the things they're interested in and they're curious about and their confidence in having a conversation, you watch those things grow. It's truly remarkable.

So, I'm really curious because I did notice digging around on your webpage that this idea of FabNewport, which is really broad in terms of the things that you're doing, so as you're going about doing all of these things, how did you make the strategic decision as an organization to shift from making in fab into taking kids to the beach to surf or to go learn sailing? I mean, from an organizational sort of standpoint and when you sort of think about the trajectory of the shifting of thinking about the way teaching and learning for most folks works successfully, we know it has to be fully immersive, which is exactly what you're doing. But that is not a strategic direction, for example, that a lot of our schools or communities are really comfortable with and yet you've made this transition.

**Steve Heath:**

Yeah. I remember early on, I invited some people in for a strategic planning session and I remember somebody saying, "Steve, you're doing too much."

**Annalies Corbin:**

I've heard that.

**Steve Heath:**

Yeah. And my mother says the same thing. It's been challenging and it's tough on the staff because you're asking a lot of them. You're asking them to change gears. We had our summer planning meeting and it's like, oh, my gosh, going from 20 kids to a summer program to a 100 kids and learning teams, that's a big jump.

But when you see what it does for the kids - and we started small and I've got, like, three of those core team members who were there when we began this summertime enterprise - you can't not do it. And if you can't do it, then you go somewhere else. And I always say to anyone who we're bringing on board, are you comfortable working in ambiguity? Because it's not easy work. And when you're out riding a bike, or you're out on a boat and boating is not your thing, or you're bringing kids to the beach and they're surfing and you don't even want to go in the ocean, well, it's just kind of the way it is. But when you see what it does for the kids, like if you were to come out and visit, my favorite thing to do is to bring someone out in the summertime and take them from the bird sanctuary to the beach, to the harbor, into the lab, and you go, "Oh, my God," that's how the kids feel, they light up.

And so, kind of what I've dialed it in on - and I'm shifting gears here a little bit, which I do a lot and I can confuse people too. So, I call myself a professional confuser - it's like we want every kid to have a positive future vision that's grounded in what they're interested in. And we want to get them all in on this concept. So, our pledge to them is that we will provide the resources, opportunities, and relationships that will allow you to thrive. And that's what the community has to offer and that is our job to make those connections for them. My boldest vision for that is that we can flip the narrative.

And so, when I say that, we have kids going to school who are being measured by four things, grades, test scores, attendance, and behavior. And what kind of portrait is that really painting for our kids? When we know the kid across the street who may or may not be doing well in school is a dancer, is a poet, takes care of his grandmother, does chores around the house, comes into the lab and is like, "All right. What's going on?" They love to help people. There are all these things that go unseen. And I believe it is our responsibility as the adults, as you said, doing this difficult work to really get people to think about building off the kid's strengths and move away from these metrics that are torturing our children.

**Annalies Corbin:**

Yeah, 100 percent, I would agree with that. Help my listeners, most of whom are coming out of the education world, and they do come from all over the world, so I always want to make sure that we have a bit of context for our folks that are not so U.S.-centric. Help us understand the relationship between FabNewport and Newport formal schools.

**Steve Heath:**

Okay. So, it has varied over the ten years. But presently, we run a program called the Heart Club in the middle school, which is the Newport Thompson Middle School. Actually, we have interesting titles, too. One of them is the CEO, the Chief Empathy Officer, and the other one is our Director of Community Engagement. So, they're in the school a couple of days a week running Heart Club. And they invited us in to do this because they saw the way that we were working with kids. It was making sense to them.

So, these are kids who have been referred to the dean over and over again. And so, after a while you say, "Well, it can't just be the kid. There's got to be something going on here." So, we create a space for these kids just to come in first and just decompress. And then, maybe we'll play UNO with them or just do some fun, engaging activities where we can get to know them and build some trust, and then start to think about what it is they want to do.

And one thing that has evolved out of that specifically is a cooking class. So, Ellen now has a group of ten girls and they like to cook. And last summer, they went and visited a bunch of different restaurants in town because Newport's a real tourist town. And then, we were using a kitchen at a church. And then, Ellen was planning the year, and so she's talking to the girls and they decided they want to cook for the homeless. So, once you get to know them, you transfer the power, and how cool is it that they want to do something like that.

And then, they've also asked us to step in and help with something that they call Warrior Academy, which is the most kind of - I say I don't have my language exactly right, but the kids who are doing poorly in school and they basically put them in the basement every day with the same group. So, they give us those kids and we're able to take them out into the community a couple of afternoons a week and just kind of let them know what's going on and see them. And then, most of the kids who are in our summer program are all Thompson Middle School kids or kids from the local high school. So, that's our relationship with Newport public schools.

And Ellen, our director of community engagement, has weekly conversations with the superintendent. And, ideally, what we're hoping for is to get more time with the kids during the school day to get them out into the community and experience some of the things they get to experience in the summertime.

**Annalies Corbin:**

Have you managed to have conversations or convince the schools that what you're doing doesn't just have to be an afterschool or summer sort of thing? That literally the approach that you're taking, the fully immersive, hands-on, clearly sort of approach that's happening within FabNewport has direct application into student learning. I mean, what does that look like in terms of that conversation?

I am just super curious, because the same battle we have all the time, we're like, "Oh, our kids aren't doing well. Oh, there's a reason for that. How about if?" And then, you start the battle of but that's not how we do things. Or back to your original point, that's not what we're supposed to be measuring. Who cares? But you can't really say that. I can say it here, but you know --

**Steve Heath:**

I think you nailed it. And I would say it's going slowly and it's difficult. And so, literally this morning, Ellen was on the phone with the superintendent articulating this all-in plan. And so, what we feel that we need to do, this is like the growth area for us, there's a couple pieces to the growth plan. One is we've got to get our parents more engaged. So, we've got to get the FabNewport parents more engaged, or guardians,

whoever might be the responsible adult, so they understand what we do. So, it gets to the point where the parents are letting their children go with us and do all this fun stuff, but they don't understand what it is all adding up to.

So, we're outlining a whole schedule of events for the year in which we can bring the parents in for some fun stuff, but some educational stuff, and educate them so we can kind of give them power so then they can go into the school with an informed idea about what is or what isn't happening to their child.

And then, we're working with a local professor from the University of Rhode Island. So, what does it look like? We've designed a Power Card, which is a set of internal and external assets that the kids identify, and we are working with the Search Institute's Developmental Asset Profile. We do empathy interviews. So, we're working on kind of dialing in a set of tools that would show growth in a way that's beneficial to the children, to their families, to us, the school can see the changes and we can communicate it to the larger community. And on top of all that, the hypothesis is that we will see those traditional four metrics also improve. So, that's my kind of dream scenarios that we see so much growth that it becomes obvious that we need to do more of this.

**Annalies Corbin:**

Yeah, no, I would agree with you. And it's an interesting sort of thing to see, especially when you start to get those infiltrations into the more sort of traditional set. And you have all kinds of empathy from me in terms of understanding that growth from a small program to now you're 100 kids, whatnot, in terms of just sort of thinking about what all of that looks like.

I'm really curious as you sort of think about what comes next, what's your dream? What's your hope for all of this? Because I don't know about you, but as a founder, we don't come into this, most of us, with a clue. I'm going to own that. I mean, I had no idea what I was doing or what I was getting in for. And here we are, 24 years later. And as I sort of think about what the next sort of iteration or transition is going to look like, for me, it's beyond the aspiration. At the end of the day, for me, we want to be doing high quality, meaningful things that positively impact the lives of kids and their families, trying to sort of navigate and figure out what all of that is going to look like. So, I'm curious for you, how do you think about that?

**Steve Heath:**

Well, I think about it in a lot of different ways. But do you want my boldest vision?

**Annalies Corbin:**

Yeah.

**Steve Heath:**

Okay. So, Newport is loaded with cultural, recreational, and educational opportunities. I see it, it's actually laid out pretty well in Education Reimagined's big idea video, that four minute video. If no one's watched that, I would definitely tag that in the notes section so people can see that. And we have been working closely with Education Reimagined. And I've been talking about ecosystems of learning for a while and then I heard Kelly Young, the former executive director, talking about ecosystems of learning. I said she's using language that is more advanced than mine.

So, in the way that we do as founders and just trying to keep thinking the wheels going around, we reach out and we start sending emails and calling people, and so we became involved with them. And so, they talk about home bases, which is that gathering spot, and then learning hubs and field sites. And I think more in the middle school and high school age because I think, developmentally, our middle school kids are ready to go out into the world. They feel safe. They want to explore. And if they're with trusted adults, their parents pretty much let them go. So, why isn't there a design center in the middle of town where people are gathering to do their work and to learn?

And then, the other thing - I'll go a couple different ways in explaining this - I think about Spark Experiences, then I think about kids making commitment, then I think about them being motivated, and intrinsically motivated. And developmentally, that's 11, 12, 13, 14, 15, then 16, 17, and 18. And so, we want our kids to ultimately be intrinsically motivated and supported by a group of adults, peers. But how do we lay out our communities so that way the kids can move from a home base to a learning hub, to a field site in a latticework of opportunities that are connected and they begin to design their own pathways, at first without even knowing it because they're understanding how they learn, where they like to learn, what they like to learn, who they like to be around. And then, you get 15, 16, 17, then it's like all right. Then, you get into some post secondary counseling at a learning hub and then they can begin to make decisions.

But, literally, around our communities, we should have centers of activity that are a mix of professionals and learners that are engaging in these tiered activities where we're just growing together. Because I also think about just the wellness of our kids. Are they physically fit? Are they mentally fit? And the set of relationships and as we look at our political world, we need more time mixing with each other.



So, the bold vision is this more activity in our community, cross pollination with home bases, learning hubs, and field sites scattered and open to all equitable access because we've got to put equity at the front of all of it, if we're truly going to be the kind of country that we want to be in and fill out our aspirations.

**Annalies Corbin:**

Absolutely. And Kelly would be super proud. She would love your explanation of all of that. So, I will cheer that for her. I absolutely agree. And I think that's one of the things that we're super excited about as well, you know, of joining in and being part of what's going on with Education Reimagined. And the work in that space is super exciting for us as well.

You know, I'm also really curious about what does it look like when FabNewport sort of mentors or counsels students forward. We've talked about the experiences that the students have, but I'm really curious about how you think about the sort of advocacy work as it relates to individual children and what's going on with their future.

Because it's pretty clear to me just from listening to you talk and from the materials that you sent over, there's a lot that's happening. I mean, your kids are finding their own footing and they're finding success. And a lot of that is happening because of the experiences. But I would argue as much, if not more, of that is happening because of the mentorship, that ongoing relationship component that's happening. How can you translate and scale back because that's hard?

**Steve Heath:**

Yeah. Well, translate and scale, there's scale that --

**Annalies Corbin:**

I know. It's a nasty word, right? But we have to think about it.

**Steve Heath:**

We literally are going to start using an app called Alleyoop, which is going to be for vision coaching, which is going to allow each learner to have a set of vision coaches. So, that's a way to formalize some of the mentoring. That's something we haven't totally figured out. Right now, it's a little random how our kids are connecting to certain kids, or I know more people than the next person, or some of our team are more adept at doing the mentoring and then passing it on to the person who could most help that person.

So, I don't have an answer to that scaling question, but this app and some other tools we're beginning to use should enable us a way to formalize it, and then potentially

just bring more young people into the fold and get the kind of circle of mentors they need in order to thrive. But we are committed to the concept that every child, and this is what we'll communicate to the parents, too, is that they all need to know who's on their team and that we have to build a team and the team has to be in it for the long haul.

And, again, that's one of the challenges of traditional school, is, by the time a kid gets out of high school, they've had 60 teachers. And I was talking to one of our learners yesterday, and he's in eighth grade, and I said, "Hey, who at school knows what you're interested in?" And he mentioned music and I go, "Well, who in your school knows you're interested in music?" And he mentioned his language arts teacher from last year who he doesn't see this year, so it's like, "Okay. Well, what's going to happen with that?"

**Annalies Corbin:**

Yeah. Well, that's one of the big things, the giant disconnect. And this happens when we deal with large comprehensive systems, there's a lack of personalization - and maybe that's not the right word that I'm really looking for. But the reality is there's a disconnect. There's a missing component based on an idea of relationship. And that young emerging pieces of collective work that we are in our youth that don't have the connections that they need or somebody is not there to see the growth that's happening. It makes me sad.

**Steve Heath:**

Yeah. I think we need to get our communities more involved. I mean, it can't be just, you know, a PAST enterprise or FabNewport enterprise. We have to do our work well enough that it's embraced by a wider audience. And then, we have to make it easier for people to get involved. And then, of course, we're operating often in a fear-based culture, which makes it challenging from that perspective. But we've got it. It's just continuing working hard to overcome those obstacles.

You know, what a pleasure it is, like last Friday, I took out one of our learners who's now a freshman at the local community college. And she was telling me about the sociology class she's taken. And I know a sociology professor at a local university, so I said, "Let's have lunch. This is going to be awesome." And they're connected and thinking about other things. And who knows? Maybe Katie can get a free ride at that college.

That's the kind of networking that takes place. And if we do it well,

there's plenty of people to go around to do that work. There's a lot of people in that age who are looking for something to do with their lives. But we've got to make it easier for them. Because once they start doing it, they see what gets better.

That's another thing, service. We have like multi-age learning groups and kids are doing things for each other, even sometimes the younger kids are doing things for older kids. And not only does it refine their understanding of what their knowledge is if they're teaching someone else, they develop empathy, because it's like, "Oh, I'm dealing with Annalies or I'm dealing with Steve. I got to figure out how I'm going to do this." And then, they pull that all off, there's this confidence, but that is really a form of service and that's a whole nother thing that goes just kind of by the wayside. I think it's so powerful just getting kids to do things for other people, and that should be more a part of their growth spectrum.

**Annalies Corbin:**

Absolutely. Absolutely, it is. I always like to sort of wrap the conversation with a recognition that everybody who's listening to our conversation is going to pull out different pieces and parts of it. But the goal would be, at least in part, that this conversation inspires other folks to try different things with kids out in their community. And so, what would you suggest for somebody who felt like they just didn't know how to start?

**Steve Heath:**

I would suggest either going for a walk or for a bike ride or a van, and ask kids what some of their interests are and see if you can get them to places. And a mixed group of kids. They don't all have to be interested in the same thing, because it's like the kid who says they don't want to hike and maybe they complain a little bit, all of a sudden they're up on a rocky ledge and looking out over a beautiful vista. They're going to go, "Oh, wow. I never knew that this was like that."

Because what happens when you're on those kinds of endeavors, you're shoulder to shoulder with the kids. You're in a different environment. You're able to have kind of a philosophical conversation with them that they generally don't have with their parents. And that just opens up the whole bucket of possibilities. So, the key is just to begin with a simple adventure and pay attention and ask questions and find out what's going on inside of them, and what do they want to do more of, and what do they want to find out about. And just become their friend, their mentor, their philosophical guide. The guide, you hear that Montessori and the facilitator. Just be the best guide you can be and be inquisitive and just be fun, be fun to be with.

**Annalies Corbin:**

Absolutely. I love that. I particularly love the idea of just go on an adventure and see what happens. We need to, I think, collectively do more adventuring. So, thank you very much for that, Steve. Thank you for what you do, but also for taking time out of your day to chat with us. I appreciate it.

**Steve Heath:**

All right. Thanks for your time. Have a great day.

**Annalies Corbin:**

Yeah. You as well.

Thank you for joining us for Learning Unboxed, a conversation about teaching, learning, and the future of work. I want to thank my guests and encourage you all to be part of the conversation. Meet me on social media, @annaliescorbin, and join me next time as we stand up, step back, and lean in to reimagine education.