

Annalies Corbin: [00:00:00] Welcome to the next episode of Learning Unboxed. This is Annalies Corbin, your host. And I'm very excited today to have with me two amazing guests to talk with us about a really cool and awesome program to get kids excited about science. So, today, we're going to jump right in with my guests, Mike Schott and Josh Bernstein. So, welcome to the two of you.

Josh Bernstein: [00:00:25] Thank you.

Mike Schott: [00:00:26] Thank you for having us.

Annalies Corbin: [00:00:27] So, just as a bit of background. So, Mike Schott is actually the Director of Community Development for Kauffman Development here in Columbus, Ohio. And in that hat, he's responsible for all kinds of investor relations, business development, and community relations. And he's a huge advocate in the community in Columbus, Ohio. His newest project is something called the Gravity Project, which I'm hoping we actually get to talk about again on another episode because it's got some amazing educational tie-ins.

Annalies Corbin: [00:00:55] The other hat that Mike wears and the reason that we have him here today is because he's also a head or a trustee for a private family foundation, The Harold C. Schott Foundation, which is headquartered in Cincinnati, Ohio. And through that work, he is involved in a lot of Ohio and national-based philanthropic efforts, very important as it relates to a variety of different ways we can change the world. So, we really welcome that voice today. So, thank you for that, Mike.

Annalies Corbin: [00:01:24] Joining Mike is Josh Bernstein. And Josh Bernstein is an explorer, an educator, a traveler, a storyteller, an all-around, cool guy with amazing ideas and experiences. He's also heavily involved in a variety of broadcast, television, and a variety of different documentary programs. So, you'll recognize Josh's name from a variety of programs over time. Josh is also the Founder of something called Explorer at Large, which is an amazing program that, again, just gets kids all excited about the possibility of science. So, welcome to both of you.

Josh Bernstein: [00:02:02] Thank you.

Mike Schott: [00:02:03] Thank you for having us.

Annalies Corbin: [00:02:04] So, we want to just dive right in today, pun fully intended in Josh's case. So, Josh, actually, I would like to start with you to sort of set the context for us. So, Explorer at Large is a program, and PAST is very fortunate to have been involved over the last year or so with some of this program as it relates to just trying to backfill gaps around student curiosity, tenacity, love of science, especially when it relates to the way we currently learn science traditionally in school. It's just so not functional in many ways, and a lot of kids are missing out. So, tell us, what's the 100,000-foot version of Explorer at Large?

Josh Bernstein: [00:02:45] I would say it boils down to two words - courage and curiosity. The courage to be an explorer, to want to go around the corners and over the horizon to see what's there, to have those questions. And the curiosity lends itself to the scientific mindset, problem-based learning. Einstein famously said he has no special talent except he's very, very curious. That passionate curiosity is what drives lifelong learning.

Josh Bernstein: [00:03:09] So, our hope with Explorer at Large is to get children, adults as well based on my work in TV, but children now who become passionately curious, and courageous, and take a leap into education.

Annalies Corbin: [00:03:19] And so, given the fact that you want to instill that, why step out of what you're doing all the time. And you spent many years being involved within directing, a lot of outdoor and wilderness education. You're clearly really intimately involved in that whole space of curiosity and exploration, and a lot of the hands-on applied stuff that, certainly, the PAST foundation, we advocate for. So, why shift from the traditional things that you're constantly doing into a very specific program opportunity?

Josh Bernstein: [00:03:50] I think, looking back, it was a natural progression of both skills and opportunities. So, when I ran the survival school, which was my first career after college, I was there for 25 years out in the West in Utah and Colorado, educating adults from all around the world to come out on the trail for up to a month, where we would teach survival skills, native wisdom, learn to do more with less, the more you know, the less you need to carry.

Josh Bernstein: [00:04:18] And so, that that curriculum, that sort of immersive, experiential education perspective was fantastic for me because I am more of a kinetic hands-on learner, and therefore teacher. But what I discovered when I was approached, at a certain point, because of the sort of survival phenomenon that happened in the media, our school benefited tremendously. And then, the networks that were asking as the front person what I'd be interested in making the shift to television.

Josh Bernstein: [00:04:45] And as an educator, I had zero interest. I was like, "No, I'm not an actor. I was never in a theater. I don't care to be on stage or in the spotlight." But as an educator, for me to take an audience of what was 10 or 15 clients, and expand that to, now, several million people to watch a show, it was like, "Well that's a pretty amazing opportunity." And so, that got me into the television networks of History Channel and Discovery Channel.

Josh Bernstein: [00:05:08] And then, what shifted into education specifically and formal education was, how do we move the needle around the world? If I'm going to be in 200 countries, which I'm grateful for, through these documentaries, how do we actually change the world? And you have to get kids younger. The demo of TV is an older demo. They want you to buy insurance or cars, but how do you ignite passions? And at what point do you have the most impact? And for us, it's really starting at like age 4. Like how do you get to kindergarteners and light that? And so, it's an upstream solution.

Josh Bernstein: [00:05:40] Yeah, we can install the problems later in college and connect to career paths, but if you can get more kids to fall in love with these paths of becoming oceanographers, or volcanologists, or whatever, like every little kid wants to

be a dinosaur hunter or an astronaut, but somehow along the way, education, I think, diminishes that passion in curiosity. And so, my goal was like, "Wait a minute. If I'm going to have an audience and a skill set, let me see if I can focus that in schools," which is where Explorer at Large was born.

Annalies Corbin: [00:06:07] Right, right. So, Mike, how on earth do you get in the middle of this kind of crazy idea? Where is the original synergy that led to a conversation that, ultimately, gets to sort of the role that you have in Explorer at Large? So, where's the connector

Annalies Corbin: [00:06:29] Because that's the thing, I mean, the reality of school or education, and teaching, and learning thought about very differently is literally about what do I do differently. And the folks that are listening are out there contemplating with a whole array of partners and available resources or lack of resources. And the thing that everybody wants to know is how do we do some tiny aspect or how do we get that thing into our community? So, what do you have to do with this?

Mike Schott: [00:06:56] Great question. There's probably a short, a long, and a very long answer to that. The middle answer to that is I've been very blessed at a young age to have the opportunity to play a philanthropic role in this community and nationally. And over the last five years in that role, I've really tried to hone my focus a little bit. Like, what should I be focused on to help impact my community and, ideally, scale some of those initiatives nationally or internationally?

Mike Schott: [00:07:23] And education and youth development, in general, has been a gigantic passion of mine since I was a child really. But in these last five years, I've just sort of explored the landscape of what it means to make a difference in the world of children, and how they're sort of brought up through the education system, and then what wraparound services can you, add just to add a lot of exposure opportunities and a variety of different ways for kids to learn about themselves and the world outside of the traditional education system.

Mike Schott: [00:07:57] So, we've been testing and iterating with that with various organizations here locally from the Boys and Girls Club, which is more of an after-school program, to Junior Achievement, which is more of an in-school program, and several other both established non-profits and early-stage program, I would say.

Mike Schott: [00:08:13] Explorer at Large was kind of a synergy of everything I became passionate about over the last five years and fit in with my general, I would call, investment thesis, philanthropic investment thesis, which is a very unique collaboration of highly talented teams, which is what Explorer at Large is, which I'm sure we'll get into soon clear.

Mike Schott: [00:08:34] Clearly, it's very innovative and impactful now that we've had a chance to study it, which are two very key metrics for me that I look at at for any investment. And I wanted to just see like, what would happen if we expose kids to different pathways in the world? And I know we're early in the process of testing this, but I have a world view of you become a product of what you're exposed to over your lifetime. And the more we can expose kids early to the things that they may never have had exposure to, I believe that provides them with a robust amount of opportunities throughout their life.

Annalies Corbin: [00:09:13] I would agree with that. And we see that certainly every single day at PAST. And we advocate for it over and over again that in addition to sort of changing the global paradigm around, "I can't be what I can't see," we we always want to add in, "You can't do it you don't know.". And so, to your point, we have to be able to show kids what's possible. And that's part of the beauty of it.

Annalies Corbin: [00:09:36] So, Josh give us give us the rundown. So, you conceived this idea. And, now, we're actually getting to the point where you have to do something with this. So, walk out listeners through a little bit around pulling together. Josh mentioned the team. It's really, really important as we go through. And so, as Mike mentioned, that team ultimately was going to be one of the deciding factors as as a funder and a philanthropist, that you have the right folks in and around that. So, what

does that look like? How do you decide the team? And then, how do you decide where to go with this thing?

Josh Bernstein: [00:10:11] So, there are three primary participating groups in Explorer at Large. Let me back up a second. So, we have an ecosystem. And this ecosystem of learning is generated, first, from videos. So, I'm a firm believer that if you can't engage an audience, then there can be no education. So, the first step is engagement. And for kids these days -- really, everyone, it's sort of an epidemic, but kids are locked into their screens. So, we know that the kids are watching their phones. And smartphones are becoming just more and more ubiquitous and ever present.

Josh Bernstein: [00:10:43] So, I said, "Okay. If we're going to have to convert an educational mindset into the space of a phone, we have to engage an audience." So, the production piece, the videos, where I'm coming from as a professional. So, let's say, if you look at it a one-hour documentary, there's always that one act that hooks you. That's the tease that the networks would play. So, if you're rappelling into a volcano, or diving with sharks, or doing whatever that commercial teases i. So, I say, "Well, what if the show, the five-minute piece, was just that?" So, it's a five-minute story, which I host, where I meet an expert, ask a question, get hands-on kinetics.

Josh Bernstein: [00:11:20] So, for example, we would go to a zoo and talk to an animal expert about some quandary like, "How do you take care of lions? Lions are made for Africa, and here they are in Ohio. So, how do you care for them?" which is in and of itself a fascinating study in biology and nutrition. But then, we would bring in in an addition to the production piece. That's the first team, production of content.

Josh Bernstein: [00:11:40] Then, there's, "How do you wrap it in such a way that the teachers can effectively use it?" given everyone has standards, and concerns around education, and especially in formal education. Is it better in the classroom? Is it better after school? So, that's where the PAST Foundation comes into the picture, which is how we met because I was looking for an instructional design team that could take the content that I create to my production company and wrap it in such a way that's teacher-friendly, and then effective for students.

Josh Bernstein: [00:12:05] And the third part of the tripod is research and evaluation. So, how do we know it's actually doing that something? And we say we want to affect change, but how do we measure that? And so, that's where Oregon State University came in, and Dr. Martin Storksdiek's team. So, my team does the production. PAST Foundation does the instruction unit design and the educational wrapping. And then, Martin and his team does the, "Are we effective? Are we moving the needle? And how can we move it more?" That's the ecosystem.

Annalies Corbin: [00:12:35] Yeah, and the ecosystem sets the stage. So, it's critically important as a tie for everything together. So, how do you go from this team in this ecosystem then literally, to Columbus, Ohio? And we're going to talk about what happened at scale, but location is important. And you learned some valuable lessons as it relates to location. So, share those with us.

Josh Bernstein: [00:12:55] So, I live in Washington DC. And so, originally, it's out of convenience, I thought we would pilot this in DC, at DCPS, the public-school system there. But DC is known nationally, if not internationally, for its bureaucracy. And after several months of just trying to get down, and knock down the right doors, and get into it, we sat in on classrooms, and we figured out what district, but we couldn't get the contractual obligations. We couldn't lock it up before our funders might include it. We're putting some pressure on.

Josh Bernstein: [00:13:25] So, our funding. I mean, this is philanthropically funded through grants. And so, the Bezos Family Foundation, and the Schott Foundation, and others were saying, "Look, we think that this could be great, but it has to happen now." And so, we pivoted because of, honestly, your input when you said, "Look, I know you're struggling in DC. Why don't you bring this to Ohio?" We were already contracted then, so I said, "If PAST is going to do this, and you have a pipeline into schools, why don't we move to Ohio?"

Josh Bernstein: [00:13:50] And what's nice about Central Ohio is that it's large enough to have real issues that help us figure out how to problem solve for scale, but small

enough that you can move quickly through the system. So, I think that while, at the time, I was frustrated the DCPS wasn't working with us, we'll come back to them, but-

Annalies Corbin: [00:14:04] You will, yeah.

Josh Bernstein: [00:14:05] But Ohio was a great pivot for us, and it allowed us to, then, work more deeply with the Schott Foundation, and the Columbus Foundation, and other regional partners who were excited to say, "Wait a minute. We can..." So, Columbus, it's a fascinating community of forward-thinking education, passionate leaders. And so, I'm so grateful that we've ended up here.

Annalies Corbin: [00:14:28] Yeah. Well, we're certainly grateful for that as well. And, I think, just for some context pieces for our listeners -- and, again, resources get posted on the website, things that we talk about today, we will dig in and provide those for folks who want more.

Annalies Corbin: [00:14:43] But first and foremost, just sort of stress from Josh's comments, the difficulties with getting new programs started in very large urban, highly bureaucratic districts is not a knock on DC public schools. It's just a very common constraint. It takes a lot of time. It's very, very complex. And, oftentimes, those environments are not the best pilot locations for all the reasons that Josh mentioned.

Annalies Corbin: [00:15:09] But Mike, that brings us then back to Columbus. And I remember this very early conversation with Josh around, "Hey, let's move this thing." And my perspective on why move this thing from PAST Foundation doing the program design is we are so entrenched in so many schools in and around the Central Ohio region, in a multistate region, but there is more to it than that because Columbus is a pretty special place when it comes to innovation. And I know that you bump up against that all the time in both the hats that you wear. So, from your perspective, why Columbus is a perfect place to pilot something like this?

Mike Schott: [00:15:45] Yeah, great question. I think the tagline is the Columbus way, right. And it's all about collaboration. And Columbus is at a point in its growth as a city

that everyone is still very much arm in arm, "Let's make our community amazing." And there's different people working in every sector to make that dream a reality.

Mike Schott: [00:16:06] Education has always been a priority for almost every community, but what we're doing here is we're coming at the issue with an open mind, and a collaborative approach, and testing new things that we may not have been able to test in the past. And I believe there's more philanthropic dollars focused on innovative programs that are collaborations now more than ever.

Mike Schott: [00:16:30] And I think, collaboration, which is the theme of Columbus, is also the theme of how to get these programs off the ground. It really takes public, private, philanthropic partnerships to make these things work. And with your established network here in Columbus, it was just remarkable to see how quickly we were able to get into that school system, which, without that, I don't think we would have made the progress we have in that short a time. And believe, because of what we've been able to prove, now, once you've tested the waters here in Columbus, once we know things work, I believe this is a community that will rally around those programs and help them scale in our community and hopefully beyond.

Annalies Corbin: [00:17:08] And I think that's one of the things that we see over and over again in this community and other communities across the country and around the globe that have a similar mindset. So, on the one hand, we are very much about startup, and entrepreneurship, and innovation. But on the other hand, we are also very mindful about outcomes and long-term successes. So, I would like to think that as a community, we're very balanced in that sense, which it gets to sort of the heart of some of the pieces.

Annalies Corbin: [00:17:36] So, Josh, as we started to then work on and fleshing out, several key components had to come together to make this happen. So, one, first and foremost, is obviously the funding that would be required to actually go from concept to pilot. And just to be really clear with our listeners, so Josh came to the project with a set of some pilot videos that we could use to sort of test the process.

Annalies Corbin: [00:18:03] So, could you touch base just a little bit about how we were able to utilize in the pilot phase, that is the launching point, so that we can talk a little bit about how we designed the program in the curriculum for the pilot to move us from that point?

Josh Bernstein: [00:18:17] Sure, yeah. So, things started. Explorer at Large started with an i3 grant from Department of Ed through the Smithsonian Institution. So, as I said, I was in DC working on this for several years before we made the pivot and came here to Ohio. And so, the Smithsonian and I were looking for ways to share the depth and breadth of the Smithsonian through visual content. So, I said, "All right. This is it. Great job. You've got 19 museums, and nine research centers, and hundreds of millions of artifacts. Let me tell those stories and engage kids."

Josh Bernstein: [00:18:47] So, that money, the first dollars in created 20 videos. And then, the question then became, how do we put these videos into classrooms, and what are the standards or the curriculum that get wrapped around them? And then, unfortunately, just for a variety of reasons, things stopped. And so, I was faced with the challenge of like, where do I take this now that we've -- we've got the videos, but we can't do -- it's not just a press-and-play. There's got to be more to it than that.

Josh Bernstein: [00:19:11] So, that's when I reached out to education-friendly philanthropic organizations. And, ultimately, the Bezos Family Foundation said, "This is interesting. We are very curious to see what happens when this gets wrapped into an instructional pedagogy, and then placed in classrooms. We will challenge a community to match our funds."

Josh Bernstein: [00:19:33] And so, that's when the Columbus Foundation, and the Schott Foundation, and Battelle here in Ohio said, "We'll match that challenge. We'll meet that challenge, and we'll put that in the schools here, and then pass..." Thanks because, Mike, to your distribution in the pipeline you have in the districts, we got a chance to actually do more than just show videos.

Josh Bernstein: [00:19:51] And I think for people who are like, "Yeah, people understand it conceptually. Oh, there's a video." We're like, "We can watch someone for five minutes, ask an Expert a question." So, in these first round of the 20 videos we selected, 11 that we divided into three specific instructional units. And let's say, for the one on, there's one in waterways, there's one on pollination and orchids, and there was one on nutrition. So, the nutrition one has the pandas. Everyone loves the pandas.

Annalies Corbin: [00:20:15] Everyone loves the pandas.

Josh Bernstein: [00:20:16] So, we filmed at the National Zoo. And the question, again, to helping your audience understand, it's like when you look at pandas, the panda bear, being a bear, should be a carnivore. These bears eat meat. But the Panda eats bamboo. So, why does this panda eat bamboo? And how did it adapt morphological you over time to facilitate that? There's digestive issues. There's as adaptations on the teeth. There's adaptations to their fingers, the pseudo thumb. So, that's the question that I go into the National Zoo with.

Josh Bernstein: [00:20:46] And I meet the expert. In this case, Marty Dearie. And Marty would be like, "Yeah. Let's walk through the physiology of the panda. And here's how we feed the panda." And then, more fun because this is for kids and school, it's like we go into the panda enclosure and gather their poop, which is you say, "Poop," and kids are engaged.

Annalies Corbin: [00:21:03] Kids love poop. I mean, you can't go wrong. Yeah, absolutely.

Josh Bernstein: [00:21:05] So, the opportunity to tell these stories, and then to -- thanks to the funders to wrap them with educational content and give teachers the ability to connect the stories in the field with classroom content is proven to be magical.

Annalies Corbin: [00:21:18] And it is kind of magical. And I think one of the things that has been the most fun, certainly, for us, and we'll talk a little bit more in a minute about that program design, the curriculum component of it, but just sort of from the outside

looking in, one of the things it's really intriguing about this project and, certainly, why it had so much appeal for us is because the kids become so engaged instantly.

Annalies Corbin: [00:21:39] I mean, one of the beauties of it is you've created this character, the Explorer at Large, Josh, who all the kids want to be Josh. They want to be just like Josh. They see themselves in you no matter what their background experience because you found a way to make it relatable.

Annalies Corbin: [00:21:56] The difficult piece in all of this is then, how do you take all of those concepts, some of which are pretty complex, and turn it into a nugget that a kindergarten, third grade, fifth, middle school, and ultimately later maybe even at the high school level can find appealing and dig in to becomes that complex factor.

Josh Bernstein: [00:22:16] Well, I don't know. I feel like that's the spot that I really enjoy. Honestly, that's what my skill set and what comes to learning the craft of hosting has taught me. And job for History, and Discovery, and Nat Geo has been to complex, culturally-important touchstone stories, and synthesize the questions with experts about mysteries - the Ark of the Covenant, Holy of the Amazon. How do you make an audience care?

Josh Bernstein: [00:22:43] And so, then, just converting that skill set to an audience of kids, the biggest question for me was, would little kids, 5-year-olds, 6-year-olds, 8-year-olds, from impoverished communities connect with this middle-age white guy? I was like, "Can we sell that?"

Annalies Corbin: [00:22:58] It was the hat.

Josh Bernstein: [00:22:58] Well, I think the hat represents a a mindset of exploration and curiosity. We call it the explorer hat even though it's a cowboy hat. It's not a cowboy thing. It's a hat about exploration. And these kids in the classrooms that we piloted, we gave them explorer hats, and they put on their hats, and they went to the zoo, and they went to the different parks, and they fell in love with being an explorer.

Josh Bernstein: [00:23:17] And I remember in the pilot when this one four-year-old black girl looks up to me with her pink explorer hat on, she's like, "I look just like you, Josh." I'm like, "God bless you. Yeah, you do because you're an explorer." And that's when I said this can work. How do we get more kids to fall in love with learning through curiosity and courage?

Annalies Corbin: [00:23:36] Yeah. I mean, I think that when you get to the point that the student, the teacher, the school, the community embraces the ethos of the idea that it could be any participant standing in the shoes or wearing that hat, in case, that that's the big win.

Josh Bernstein: [00:23:52] Eventually, we'll have other people on camera, not just me. So, we'll more diversity in race, and ethnicity, and also skill sets where there'll be actual -- I'm more of a generalist when it comes to my skill set, but I'll be training. We'll eventually have a contest where others can have my job.

Annalies Corbin: [00:24:08] I think that would go very well.

Josh Bernstein: [00:24:09] Some scale.

Annalies Corbin: [00:24:09] Yeah, absolutely.

Mike Schott: [00:24:10] I'm throwing my hat.

Josh Bernstein: [00:24:11] Exactly. Hat required.

Annalies Corbin: [00:24:13] We all want the hat. Yeah.

Josh Bernstein: [00:24:15] Yeah.

Annalies Corbin: [00:24:16] So, before we dig into the design and development of the curriculum, so the program to wrap around these amazing, fun videos and these experiences for students, Mike, I want to circle back around to talk about the

conversations and the structure that has to take place at the community level because, again, folks that are listening are trying to figure out, "That's awesome. Can I bring Explorer at Large to my community?" (A), and the answer's yes. We'll come back to that. But (B), if for some reason I can't, or there are components of what I'm hearing today tied to another topic or something else that I want to be able to digest and actually leverage. And I think that's part of the value here.

Annalies Corbin: [00:24:54] And so, as Explorer at Large comes to Columbus and Explorer at Large has to have the seed funding to do, and build, and orchestrate this pilot, it required, as Josh indicated, multiple partners come to the table. It wasn't one lift. And in many ways, in the philanthropic community, that's the preferred way currently to do lots of things. It's that multiple leverage points. So, can you talk about that a little bit, and sort of what was your role in the community in trying to sort of push that collaborative agenda around making a pilot here possible?

Mike Schott: [00:25:26] Sure, happy to expand on that. When I learned that we had the opportunity to bring this here, and we had a matching grant hanging in the wings, which is always a very powerful tool, I really highly encourage other funders and other community organizations to think about leveraging matchings gifts because it does incentivize action from other funders. And we do it a lot. We issue a lot of matches. And oftentimes, we meet a lot of matches, depending on where we're at with the organization.

Mike Schott: [00:25:51] But I also knew when we were bringing this to Columbus, because it's a national program, we have great local ties through PAST, but it was exploring things elsewhere. How do we bring it here? And I knew we needed to bring other collaborative funders to the table to make this a reality, not just for the pilot, but really for the whole seed and, eventually, growth stage both in Columbus and beyond. And that's just part of the ethos of Columbus, but I think it's an ethos of every community. The more people you can bring together to collaborate on the investor side, on the philanthropic side, that is really how you go from just a 10x idea to 100x idea.

Mike Schott: [00:26:30] So, as soon as I got the call that this was a possibility, I went to our foundation and was able to match some of the funds that were required to trigger the Bezos family gift. And then, I knew, luckily, we've had a lot of experience collaborating with the Columbus Foundation, who are incredible partners, and I would argue one of the best community foundations in the country, maybe the world. And so, they immediately stepped up within a week or two and said, "We're in." And then, Battelle, who is obviously an amazing supporter of the PAST Foundation and, really, just innovation in general in our community quickly came to the table as well.

Josh Bernstein: [00:27:07] So, it's really just I love being a catalyst for things. And if we were just able to be the first money hand to help catalyze the rest, and then you have this unique group of collaborators that are invested in the project early, then that's, I believe, a win for the long term.

Annalies Corbin: [00:27:23] And it also comes down to having a champion. And I think you can't stress that enough. For folks who listened to multiple episodes in the series, you heard Rich Rose, and I think that was episode 2, talk specifically about public-private partnership, and what that means. And you have to have that champion in the space. So, thank you, certainly for being that in this case in the local community.

Josh Bernstein: [00:27:46] Yeah. Mike is a great champion.

Annalies Corbin: [00:27:46] Mike is an awesome champion. And it's a heavy lift because you put a lot out there. You're not only putting out financial investment, but you're also putting out a lot of personal belief and interest in giving something a try and why a local community to do that. So, again, it's not something that everybody thinks about, but, it's oftentimes, critical to success of pilots moving to scale.

Annalies Corbin: [00:28:15] So, on that note, how do you take the pilot, not so much at scale, but so as we thought about how best to wrap the programmatic side around this, so that we could get the data that we need, so you can go back to funders to do bigger pieces, so you can ultimately get to scale? Let's talk a little bit, Josh, about the decision

making around what we were going to need to be able to do, to demonstrate, to show, to ultimately get to that point.

Annalies Corbin: [00:28:41] So, as we think about, for example, the curriculum component of it -- and for our listeners, the way that this work is in working with Josh, the PAST program design team really dug into specific sets of the videos. We cross-mapped and pulled out the Next Generation Science Standards that were heavily utilized to be able to figure out sort of where things were. And we, also, tapped into some local resources that we thought would make great external learning opportunities for students. Will you talk a little bit about that decision making, Josh, because you played a key role in sort of the selecting of the things that we did?

Josh Bernstein: [00:29:17] Sure, yes. So, just keeping in mind though that when we created these videos for the Smithsonian, we did not know what I was going to happen with them. So, now, looking back, and with an eye towards our future content, we would create things a little differently.

Josh Bernstein: [00:29:30] In this case, we were creating content to highlight Smithsonian assets. So, I said, of course, if we're going to do the zoo, then we're going to do pandas because who doesn't -- but we knew that these videos, the 20 videos, some of them didn't apply. Some of them are like, "It's a bit of a reach for..."

Josh Bernstein: [00:29:48] We knew we were going to be piloting in the elementary school range. So, K-3 in this case. We originally wanted K, 3, 5, and 7 but because our budget had to be more focused, we started, "Let's start at K and build our way up." So, kindergartners and third graders would not connect to the more heady, deep space, astronomy stories that we did at the Smithsonian Astrophysics Observatory, but they would connect with the stuff at the zoo.

Josh Bernstein: [00:30:09] So, that's when we started figuring out that the 20 videos could be pushed into it. We just said, "Okay, we'll take these 11. And these 11 can be further divided into three different instructional units. And then, each unit would have

two or three videos, typically, and eight or so activities that would help teachers bring the content to life."

Josh Bernstein: [00:30:30] The model, which you can speak to perhaps more expertly than I, but the idea is like the kids are engaged with the videos, and then the teachers, in a sense, take over advocacy for exploration, and through problem-based learning, would get the kids involved. So, they watch me do something on screen, and then they do it, or a similar enough version of that in the classroom. So, they practice exploration under the guidance of their teachers.

Annalies Corbin: [00:30:51] Exactly. And the teacher piece was really, really key. And we also know at PAST for many years that there's a lot of really amazing programming that exists out in the ecosystem of education, but an awful lot of it goes unused. We hear this over and over again, "Oh, yeah. That's some great program. It's not really usable in the classroom." And teachers talk about this all the time. And what we've been able to sort of boil down or distill out of that, oftentimes, is a lack of the teachers as participant in the design and development.

Annalies Corbin: [00:31:23] And so, philosophically, PAST Foundation made the decision many, many years ago that anytime we are involved in creating programming, our teachers are our key component of actually creating content, piloting, providing some of the first bet. So, from a context, sort of, standpoint, once the decision was made around which sets of videos that we were going to utilize from the Smithsonian set created these three instructional units. The PAST staff, then, created a preliminary set of activities that were, again, standards-driven and age-appropriate that we could, then, bring in groups of teachers who could co-create the final iterations of those for us.

Annalies Corbin: [00:32:05] And so, literally, that design team became all inclusive. So, it's all inclusive of Josh, as our explorer, participating and providing information and data into, sort of, where the topic was and the nuances of those topics with the teachers, and the PAST team creating activities that could, then, be implemented.

Annalies Corbin: [00:32:24] And so, that process, then, again, to your point, Josh, allowed those teachers to have ownership. That's the other thing. And that's a key piece that we have found over and over again and anytime we're talking about pilot work. So, as the teachers go through and participated, you also had a pretty wonderful opportunity to interact with them at various phases of implementation. So, the teachers came. They did the workshop. We narrowed down. We took all of their responses back. We further refined these activities and delivered them into us a set of activities for these teachers to, then, implement. And at the implementation thing phase, lots of sorts of things happen, but you got to be part of the feedback loop. So, share with us a little bit about that experience.

Josh Bernstein: [00:33:08] So, I was capturing mostly, because I was just fascinated with how the pilot would go. So, I came here quite a bit. It wasn't hard to just fly in every week or so to track what was happening. For the teacher training the professional development piece, happy to watch these, sort of, six-hour sessions where the teachers would to watch the videos, and then learn from PAST what these, sort of, pedagogical underpinnings were, and why this activity ties to that standard, which ties to your age group.

Josh Bernstein: [00:33:33] So, that was fun. And it was it was satisfying to see the teachers, as you say, take ownership for, "Oh yeah. So, my class, my kids want this," and then another. It was nice because the kindergarten teachers were in one part of the room, and the third-grade teachers on another, and there was some cross-pollination, but it was mostly between the groups. "Well, your kids would do it this way. My kids would do it that way." I was like, "Wow. These teachers, now, they're trading secrets," which is fascinating to see.

Josh Bernstein: [00:33:57] Then, for the classroom visits, which I was there mostly to just capture on video because I knew our funders would want to see that story as we, again, tell stories for scale up. But to have these little kids, sort of, freak out when I showed up in the room because I was like, "Oh no. It, probably, would've been better if just a regular camera person showed up." But for budgetary reasons, it was cheaper for me to just do it. But it gave me-

Annalies Corbin: [00:34:19] But I think the kids loved it, right?

Josh Bernstein: [00:34:22] Yeah.

Annalies Corbin: [00:34:22] Even the tangible connection.

Josh Bernstein: [00:34:24] It did because one piece of which I loved was the field trips. The videos are part one, the classroom activities are part two, the field trips is part three, and the family moments is part four. But we'll come back to that, I hope. But the field trips, where you actually connect classroom to community by going to science centers, and zoos, and children's museums, and parks, that offers -- I think, a lot of these institutions of science and in learning are suffering right now because social media and screens, as I said before, are taking over.

Josh Bernstein: [00:34:55] So, how do you get to the kinetic experience of taking kids to a place like COSI here in Ohio or the Philadelphia Zoo in Philly? So, how do we embolden these community resources? And so, that's why I said, "Well, let's connect to them. So, let's have the kids watch me go to a zoo, the National Zoo, in a video. Then, they participate in the classroom to learn about pandas or lions hands on. And then, let's take them on a field trip."

Josh Bernstein: [00:35:18] So, that was a fun piece for me to go on these field trips. And these kids, again, all wearing their little explorer hats, and running around being explorers, and feeling the completion of that cycle where they watch exploration, they practice exploration, and then they become explorers themselves, which is, again, the underpinning of this whole model.

Josh Bernstein: [00:35:37] So, yes, I love the classroom visits. I think it keeps you young to hang around with a bunch of five-year-olds or eight-year-olds. And I'm curious to see what happens as we scale up into older grade band.

Annalies Corbin: [00:35:46] Yeah. And so, as we scale on the program, and one of these days, we'll have to have Mike go on one of these field trips because you've not seen anything until you've seen 20 little explorers in the middle of the creek with crawdads hanging off the ends their explorer Josh hats.

Josh Bernstein: [00:36:01] That was when we knew we had something special is when the parents were calling the teacher saying, "What did you do with my kid yesterday?"

Annalies Corbin: [00:36:10] Yeah.

Josh Bernstein: [00:36:10] Like, "What did you actually do?" They're coming home excited at a level that didn't exist in a typical public school. And so, I was like, "Wow, let's keep doing this."

Annalies Corbin: [00:36:17] Yeah. And I think, also, just for the sake of transparency, so the teachers in the schools that we participated with in the pilot, which represented just shy of 600 kids. So, we're pretty darn proud of how many kids that we exposed to this program and utilizing the pilot to pull data. And they came from urban, from rural, from near urban, and including some kids that were in a variety of places - charters, publics. So, we have quite the variety of students participate by design, so that we could make sure that we were tapping into as much knowledge as we possibly can.

Josh Bernstein: [00:36:52] With 70% to 90% free-and-reduced lunch.

Annalies Corbin: [00:36:54] Exactly, yeah.

Josh Bernstein: [00:36:54] These are communities that could really benefit from this type of programming.

Annalies Corbin: [00:36:58] And I think that the other thing to keep in mind as it relates to the program, and one of the big giant questions both that you have to ask as a community contemplating pulling in new programming, or funders, or other communities even talking about, "Should I engage in this?" is there's an intriguing gap that's

happened in K-12 as it relates, in particular, to science and science in the early grade bands. In the heavy push and lift around literacies, both written, and oral, and mathematics, some things fall by the wayside.

Annalies Corbin: [00:37:33] And what we know is that very few states and school districts, actually, test kids in science in early elementary school. And because we don't test it, it doesn't count. So, what happens is that reading and math are happening in a vacuum with no context.

Annalies Corbin: [00:37:48] And so, that sort of native, fun thing about school, and elementary, and certainly as you move into middle school, because we've essentially tested that out of kids, that natural curiosity where we're allowing it to be lost. And so, one of the great things about this program is it allows you to roll through context, reading, and mathematics back through that lens of science. And it's fun. All kids are natural explorers, as Josh has pointed out.

Annalies Corbin: [00:38:17] So, as we think about then what happens, and we get to those sort of scale piece, one of the other pieces that was really important in all of this, and the question that you asked earlier, Josh, about what does the school look like in middle school. And so, we created a whole set of these family moments or that opportunity for the families to engage in this. So, talk, Josh, about why that piece is important. Not so much how we did it, but the importance of that piece as it relates to long-term scalability of this program.

Josh Bernstein: [00:38:45] The family moments, I always give credit to the Bezos Family Foundation for that because they were -- specifically, Jackie Bezos said, "How does this improve the communities that you're going to be in? How do we bring this full circle? So, it's great that you're in the classrooms, and it's great that you're getting kids to go to zoos, and to parks, and to science centers. But where does it come into the nuclear family and shift that dynamic, so that kids are sharing their insights and their experiences with their parents or their caregivers?"

Josh Bernstein: [00:39:15] And I was like, "Well, that's a that's a fascinating question." I was like, "Well, how do we crack that now?" How do we get kids to tell their parents, 'This is what I'm learning.' And how do we get the oversight from caregivers just to be tracking. Now, some of it we're limited because of the timeline of our pilot. And some of it were limited also because of technology and issues like we have to make sure that we have permissions with this young audience.

Josh Bernstein: [00:39:35] But I think that with our scale up, we'll be able to dive more deeply into that family moment inflection point where we can have kids and parents engage together. We did have this on two field trips where parents brought their kids or, really, kids brought their parents to the field trip.

Annalies Corbin: [00:39:50] That's right, yeah.

Josh Bernstein: [00:39:51] And we got to see this dynamic of like, "Wow, the kid is now showing their parents what's exciting about exploration and what they're all learning." But I would say, in fairness, we just started to do that because of the timeline we were under. There's still much more to be learned. We got 90% of what we wanted in the classroom and maybe, I don't know 25%-30% of what we wanted in family moments. So, it's still TBD on that front.

Annalies Corbin: [00:40:14] Yeah.

Mike Schott: [00:40:14] Well, I'm hopeful that the family moment piece will be the enforcement of how powerful that experience and memory was. If we're really trying to expose kids to unique things in the world, if you can share that, at that time, your parents the most important and influential figures in your life. Hopefully, over time, the parents would be like, "Wow, he was super, or she was super lit up about this. We got to go do more of that and, sort of, reinforce that that passion over time."

Annalies Corbin: [00:40:38] And our teachers did report back that they heard from the parents. They heard from family. So, kids were clearly going home talking about this. They were asking and wanting more. But I think the other thing that we bumped up

against on the family moment, part of the issue, of course, was timing on the pilot, how much time we had to do X, Y, or Z.

Annalies Corbin: [00:40:59] But the other piece of it is that a lot of that component needs to happen in not just family settings. And I think that we have to be really mindful that there is a mass variety in how one defines family, and what family settings are, and what family settings can do based on a whole host of circumstances.

Annalies Corbin: [00:41:19] And so, the ecosystem around creating opportunity out of a traditional classroom setting needs to be all-encompassing, so we can catch folks where they are. And so, part of that comes through creating partnerships with after-school programs, with our informal ed partners in and around cities and communities. And that's a big lift, right? That comes back to that sort of community, sort of, ethos, I guess, if you will. And there's a lot of work that has to be done in that space.

Annalies Corbin: [00:41:46] And so, one of the things that we thought about for that was, how do we take those classroom activities and recognize, for example, an after-school program girls and boys club to tap into something that you're actively engaged in, Mike? We had to be able to make sure that those activities could be facilitated by a variety of folks. You didn't have to be a trained teacher to be able to pull the program off. And, also, we had to be able to bundle them in such a way that those moments could actually be tied together.

Annalies Corbin: [00:42:19] And so, that, I think, as we scale, becomes one of those key components that we have to continue to keep building. We did run the program in a summer program experience at KIPP, which is a charter program, that's a national school experience. And in the summertime, we had KIPP students participating in four weeks of programming tied to, can we rebound all those, add ancillary materials to them, and turn it into a program that a teacher, a school, an after-school program could roll multiple ways. It was very successful.

Annalies Corbin: [00:42:50] So, Josh, you actually came in on one of those virtually, and the kids absolutely -- once again, it didn't matter if you were there in person or not, Explorer Josh was there. So, that was a big, fun deal.

Josh Bernstein: [00:43:02] Yeah, it was fun. It was fun. And I appreciate that the pilot has experimental pieces to it. So, we knew we wanted to be testing the formal ed piece in classrooms, in public schools. But then, we said, "Well, let's add the charters and see what that brings." And then, like, "What about after-school? Do we want formula, or do we want the more informal? And what about the education level of the people who are transmitting the Explorer at Large content, are they trained teachers or are they volunteers?"

Josh Bernstein: [00:43:27] And so, I appreciate that we were broad in our work for the first nine months of the pilot. And, now, as we scale, we can go deeper into some areas where we say, "Oh, this worked really well, and we've improved a little bit," or, "Let's continue to explore and experiment." But, yeah, anytime I can use and leverage technology to come into a classroom, yeah, sign me up.

Annalies Corbin: [00:43:48] Yeah, exactly, exactly. So, let's talk about scale. So, what does scale look like? What happens now? Where are we?

Josh Bernstein: [00:43:56] So, our research report was delivered to our funders a few months ago, and we just heard a few weeks ago what our plan is in terms of what cities. Like beyond -- we're always going to stay in Ohio. Ohio has proven itself to be-

Mike Schott: [00:44:10] Whew.

Annalies Corbin: [00:44:10] We're the test kitchen.

Josh Bernstein: [00:44:10] Exactly, yeah.

Annalies Corbin: [00:44:10] Go see us.

Josh Bernstein: [00:44:13] This is. I mean, we call the test kitchen because the chefs here are going to be cooking and preparing things and experimenting with things that don't get pushed out to the other test kitchens or restaurants, depending on how we metaphor it. But we are looking for a number of other cities, partner cities, or hotspots to partner with and bring our content to.

Josh Bernstein: [00:44:35] So, a short list. And we've had many meetings in Philadelphia, some in San Francisco. We want to have, again, similar to how we had urban, suburb, and near urban, and rural, we want to have distribution across the country in ways that give us access to more populations than just urban centers. But we do want to bring ExAL, it's the shorthand for Explorer at Large. We do want to bring ExAL into more than just Ohio.

Annalies Corbin: [00:44:58] Yeah, absolutely.

Josh Bernstein: [00:44:58] And so, we're looking at national partners. I like the public, private, and national, regional, local partnerships for funding. So, we're looking for a national funder who would say, "Yes, we would challenge these communities to match our funds." And then, we will look for like the Schott Foundation, and the Columbus Foundation, and Battelle. We look for regional and local partners to say, "Sign us up. We want this to happen in our schools, to our kids, and the community here.".

Josh Bernstein: [00:45:26] Same with the science centers, ASTC, the zoos, and AZA, like that. There are organizations where we dovetail very nicely. So, we know what the resources are. It helps us if there is a zoo, if there's a science museum, if there is an aquarium. It helps if there's a park system that we don't have to have such a high level of entry where you have to have a giant building that's a multi-million-dollar facility. As long as you have a creek, we can talk about ecosystems. So, we try to get engagement from the classroom, outside the walls, into the community. So, we want to make sure that we have that piece.

Josh Bernstein: [00:45:58] And, now, we not just got back. As you know, I was in the Gulf last week talking to people in the UAE and in Bahrain about scaling this into other

countries. And it's more at the mindset of, how do we prepare a future generation to be science-literate, compassionate leaders. That's not an American thing.

Annalies Corbin: [00:46:13] No.

Josh Bernstein: [00:46:13] That's a global thing.

Annalies Corbin: [00:46:14] It's a global thing, absolutely.

Josh Bernstein: [00:46:15] So, our scale-up opportunities are going to be a combination of where do we think we want to go based on the demographic or psychographic. And then, where do people want us to come? So, if a community reaches out and says, "We have the schools. We have the political will to make this happen. We have, hopefully, the financial capital to invest and make this real," it's not a cheap endeavor to create all this material and to execute it well, then, we're open for those conversations.

Annalies Corbin: [00:46:39] Can you imagine a world, Mike, where you walk into an elementary or middle school, and you ask the question, "What are you learning in science?" in random schools in and around, and suddenly you hear about this guy, Explorer Josh, and that we're off doing these things. Is that possible in your mind?

Mike Schott: [00:47:01] Sure. I think, now more than ever, with the ability to distribute content to anyone almost around the world is remarkable. I mean, we're at an unprecedented time in history, and which is one of the reasons we got involved. This is sort of the confluence of the future of learning. And I believe we can scale this in so many different ways. And my job is to help this group swim downstream and find the ways that we can really find the right currents to jump in and make sure we can scale strategically thoughtfully and, hopefully, impactfully.

Annalies Corbin: [00:47:33] Yeah, absolutely. And I know that, collectively, everybody is really looking forward to doing that. And I know the PAST team is just anxious to start building kind of the next pieces. And as we think about what scale looks like and, sort

of, where or what happens with it next, I think, that it's also, sort of, fair to share that when we started in those lower grades, there is a great need around science exploration.

Annalies Corbin: [00:48:01] And one of the pilot outcomes, sort of, added to the lift, quite frankly, for you, Josh, as it relates to creating that next set of the video content. There was a, sort of, clear feedback from the teachers that the K, 1, 2, 3 space, and the needs of their video moment versus the needs of the kids maybe 5, 7, 9 are going to have a little bit a different twist on the content. And so, it, sort of, adds to your burden a little bit. It's all the same shoot, but you think about them a little bit differently.

Annalies Corbin: [00:48:35] And as the program does scale and start to flesh out, the other hope, of course, is that the content interlinks across so many different disciplines, and it becomes this, sort of, robust thing that ultimately gets built.

Annalies Corbin: [00:48:47] So, as communities think about this, and whether it'd be from creating new innovative science curriculum or any other programs that come to them, so what might some parting shots be from each of you as you think about sitting in my hat, I'm a teacher in a school, I'm somebody who's just heard this podcast, and I either want to bring Explorer at Large to my community, or I want to think about doing this myself. What's the one thing that you want to leave folks with to think about before they, sort of, leap? And you guys just jump in. It doesn't matter who goes first.

Josh Bernstein: [00:49:17] Well, based on what we learned here in Columbus, I think, one of the more exciting takeaways for us, for me, was that the folks at COSI, and at the Columbus Zoo, and the Franklin Park Conservatory were like, "We have access. You can come here. You don't have to go to the Smithsonian only. You don't have to film at the National Zoo when you can film at the Columbus Zoo, or the Philadelphia Zoo, or you can go to the Exploratorium in San Francisco." There are regional players that should be part of our content design.

Josh Bernstein: [00:49:50] What we like about it is kids would be -- it means there's a deepening, a deeper level of engagement when kids watched you go into their

community. It's like, "Oh, wow. He came here in the valley. He was in our museum. He was in our zoo."

Josh Bernstein: [00:50:04] And so, that's where I was like, "Oh." Originally, I was like, "Well, I'll do this all through the Smithsonian, and we'll do it through NASA. I'll do it for Noah," which are great institutions that we'll continue to work with. But to be able to lock it into regional experiences, so that kids can watch me and future mes, other hosts, go into regional resources, these treasures, and then tell stories.

Josh Bernstein: [00:50:25] So, if there's anyone listening that says, "Hey, we have a science center that I'm on the board of," or, "I'm helping the zoo try to figure out what our campaign is for next year," we could do some content. We have a python that no one has or like help us tell that story because we can bring that content, not just to your schools when we come into your city or your towns, but we can also then share that content with the world.

Annalies Corbin: [00:50:47] The world.

Josh Bernstein: [00:50:48] So, the kids, like in Bahrain, where I just was, will be watching something from San Francisco and go -- Yeah, now, there's an international connection as people kind of realize that science, curiosity, problem-based learning is a global phenomenon, not just a regional one.

Annalies Corbin: [00:51:00] Correct, absolutely. Mike?

Mike Schott: [00:51:02] Yeah. I'll piggyback that a little bit and say the beautiful thing about this model and the art really of this team is that it's a customer-driven approach. I mean, we co-create with our teachers, with our kids, with the institutions, and with the families. And I think that is really impactful and powerful.

Mike Schott: [00:51:20] And it's our job to make it easy to implement, really fun to implement, and make it aligned with what you're trying to accomplish, whether that's in

the classroom or outside the classroom. And if we can accomplish all those things as a team, hopefully, any community that wants this will be able to implement.

Annalies Corbin: [00:51:37] Yeah, absolutely. It has been so much fun, and it's truly been a privilege and a joy. So, on behalf of PAST, certainly, thank you for letting us be part of the journey. And I, also, want to thank both of you for making time today, and to coming in, and sharing the story of Explorer at Large. We're looking forward to seeing what it does next. So, thank you so much.

Mike Schott: [00:51:59] Thank you.

Josh Bernstein: [00:52:00] That was fun. Thank you.