

Opening the Door: An Introduction to SRI Education

[Sound of footsteps walking on the hard floor of a school hallway]

[In the distance, students talk to each other and a school bell rings]

[Sound of footsteps continues]

[Sound of a muffled conversation nearby, which gets louder]

[Sound of footsteps stops]

[Sound of a door opening]

[Muffled conversation suddenly becomes clear]

Todd Grindal: ...making this a better world is when we're able to bring together those perspectives, we're able to hear and understand what's happening in practice today, see the broader trends, understand what those levers are in policy and in practice that can get us to the outcomes that we want, for our kids or our communities and for the country more broadly.

Todd Grindal: I mean, it's an ambitious mission and we don't always hit it. Like we don't always get there, but I think it is what we aspire to. And, at our best, is what we're able to do.

Kori Hamilton Biagas: Absolutely.

[Intro music]

Kori Hamilton Biagas: Hello and welcome to the SRI Homeroom, a new podcast from SRI. This is a meeting place for some of the nation's most dedicated researchers, developers, data experts, and educators who are working to reduce barriers and improve outcomes for America's students and families. We'll be discussing the most persistent challenges facing today's educators and learners, and the innovative solutions that are being designed and implemented right now, to meet those challenges head-on. On the SRI Homeroom, we believe the door to a better future should be open to everyone, and we're so glad you can join us.

Kori Hamilton Biagas: I'm your host, Kori Hamilton Biagas, and today, for our first episode, I'm here with my friend, colleague, rockstar researcher, and Harvard lecturer, Todd Grindal. Welcome to the Homeroom, Todd.

Todd Grindal: Thanks, Kori. Thanks for inviting me.

Kori Hamilton Biagas: Such a pleasure. So today we want to talk a little bit about SRI Education itself: who we are, why we are, and the kinds of things that our team members are working on right now.

Kori Hamilton Biagas: So we've been talking about, just the way in which SRI is really uniquely positioned as not the policy people, not the institution of higher education, but we have this really nice integration of people who have been trained in those spaces coming together to address these large problems and challenges that we're facing regularly in education. And these really unique, diverse perspectives help SRI – SRI education in particular – to be able to tackle some of these things in a way that other institutions and other organizations are unable to do.

Todd Grindal: I think so. I often, when I talk to students or other people in the field, they ask, you know, how is this different? How is this different from academia or working in an advocacy group?

Todd Grindal: And one of the ways in which it is different is that, for me as a researcher in academia, the expectation would be that I am the expert on some narrow bit of important information and that I go deep on that. In SRI, having expertise is important, right? It's important for us to know about what the research literature says and what's happening in policy.

Todd Grindal: But in this kind of institution, we have to be a little more flexible

Kori Hamilton Biagas: Yes.

Todd Grindal: to follow what are the needs that we are hearing about in practice and in policy and to do our best to provide information to help people make decisions on a day-to-day basis. And so for my work, as I started, for a while that meant I did work trying to understand how to incentivize fruit and vegetable consumption among young children who received Supplemental Nutrition and Assistance Benefits. That wasn't the core part of what I did, but those were the needs at the time. And those are the needs I was being asked to help with.

Kori Hamilton Biagas: Right.

Todd Grindal: What I do now is I think I've, I've been able to do a lot more of work where I work closely with the policymakers, and help them provide information as their needs evolve. We've been doing this great set of projects with folks in Arkansas, the Department of Early Care and Education in Arkansas. And it started with, they had a set of questions about 'How do we reduce the use of suspension and expulsion in preschool programs?'

Todd Grindal: And I tell people about that, they're like, 'What do you mean? Kids don't get suspended and expelled?'

Kori Hamilton Biagas: Oh, yes, they do.

Todd Grindal: Oh, they do. Oh, they do at much higher rates.

Kori Hamilton Biagas: And there's a disproportionate rate. That same disproportionality that we observe in K through 12, we're seeing also at higher rates in that early learning setting, that early childhood setting.

Todd Grindal: Absolutely. It is, it is more common among children of color, more common among male children, and among children with disabilities. And, really to their credit, the state of Arkansas looked at this and said, 'All right, we have got to do something about this. This can't stand. This is not good practice for kids.'

Todd Grindal: Nobody wants this outcome. Nobody wants kids expelled from preschool, and

Kori Hamilton Biagas: Three-year-olds expelled from preschool. Right.

Todd Grindal: We're not giving up on kids. We're not giving up on kids ever, but we are certainly not giving up on them when they're three, four years old. We're not going to do it.

Kori Hamilton Biagas: Yeah. When they just got potty-trained.

Todd Grindal: Right.

Kori Hamilton Biagas: [Laughter] We need to keep helping them.

Todd Grindal: I mean, development. You spend time with one three-year-old, you know one three-year-old, right?

Kori Hamilton Biagas: Right.

Todd Grindal: Like development is huge.

Kori Hamilton Biagas: Yes.

Todd Grindal: It's on a huge range. And what the folks in the state of Arkansas recognized is, well, if you're going to care for 10, 12, 15 three- and four-year-olds, and they have that big range of development, that is not an easy job.

Kori Hamilton Biagas: Right.

Todd Grindal: It is not easy. And they're not suspending because they're bad people. They're suspending because they need help to understand how to do that better.

Kori Hamilton Biagas: Yes.

Todd Grindal: So they brought us in to say, 'Hey, we've got some ideas. We've got some things that we're trying.' Can you help us understand, are those working?

Todd Grindal: How might we make those better? So that project progressed and we learned some interesting things and provided them back to them and they helped to tweak their policy. But then as that went on, they said, you know what? As we look at our work now, one of the things we're wrestling with is that we see that our children in foster care in Arkansas, are not enrolling in preschool programs at the rate we would expect them to. And we will pay for it. We'll pay for them to do it. And we can see that this would be really valuable for children in foster care. Can you all help us understand what's going on there and help find solutions? And so coming back to, like, so what is it that's different at a place like SRI?

Todd Grindal: I didn't start that engagement with Arkansas, with an expert in foster care, right? I started with a spirit of, 'Hey, let's work on this together. Let's understand this together.' And when I need help, I'm going to call those academic experts to tell me, 'Hey, I really don't understand the details of this. Can you help me better understand that?'

Todd Grindal: But our commitment is to follow these questions to work within both the supports and the constraints within your community, within your policy context. Things cost money and states don't always have all the money to do things, but we're going to help you make this better. And that for me has been much more satisfying on a day-to-day basis than having a deep expertise in some form of, you know, child development or policy and a long list of publications and things like that.

Kori Hamilton Biagas: Yes.

Todd Grindal: That is really... as I got into this, because I came to this from practice. I was a teacher. I was a program leader. That's been, it's just been satisfying for me and it's the stuff that gets me excited to come to work every day.

Kori Hamilton Biagas: Well, that's a question I usually ask at the end. So I'm glad that you answered it already.

[Both laugh]

Kori Hamilton Biagas: So, so far you've been talking a little bit about your work and the way that SRI is uniquely positioned to reduce barriers and optimize outcomes for children. And your work is more focused on early learning and special education. But what are some of the other areas that SRI education is filling in these gaps and serving as an intermediary, an innovator, a partner? What are the other areas that SRI education is making its mark in, in the United States?

Todd Grindal: I think to understand what we do in SRI Education, it's important to understand this institute that we're part of. So SRI international, the larger institute has been around for more than 75 years. We started as part of Stanford University and for some time now have been an independent institute.

Todd Grindal: And we have this big mission within the institute that we're going to create world-changing solutions that make the world safer, healthier, and more productive. So we do that across biosciences, and computer science and engineering. We do this whole range of things. And that is like a pretty lofty mission, and you're like, 'Yeah, change the world, make it safer.' But they do, right?

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: The internet, the mouse, Siri.

Kori Hamilton Biagas: Yeah.

Todd Grindal: And we do that in education as well. We just, it means something a little different. So I'll back up and say a little like, how did I get interested in SRI? Which was as a student who was interested in the experiences of children with disabilities, I came to know SRI's work really well.

Todd Grindal: We established as a country, we established laws permitting students with disabilities to enroll in school back in the seventies. And come around the nineties, realized we didn't really know what was happening now that we'd established these laws. SRI did the foundational studies looking at, what are the actual experiences of children in school?

Todd Grindal: What's the variation in those experiences and what does that mean for their outcomes into adulthood? And not just outcomes like, 'Are they scoring well on the test?' Do they have friends?

Kori Hamilton Biagas: Right.

Todd Grindal: Are they integrated into their community?

Kori Hamilton Biagas: Mm-hmm.

We learned in SRI, through that work, these really important things that seem to matter for helping people with disabilities have the same access and opportunities as all kids. And that became part of the new, the reauthorization of that law and became part of policy.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: So we do that kind of thing now, ranging from issues for kids at birth all the way into post-secondary. We do it in a couple of different ways. We do research where we have a set of questions that we want to go find some answers about. We do it through evaluation. So there's a program and we come alongside that program and we help understand, you know, does this work for whom and in what contexts? We do a lot of technical assistance

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: We do a lot of technical assistance.

Kori Hamilton Biagas: Technical assistance. What does that even mean?
[Laughter]

Todd Grindal: Yeah. So, the laws and regulations that schools operate under are complicated and the expectations of state and federal government, the information that you're going to collect, what you're going to do in this type of situation, what do you do in this type of situation, is not easy.

Kori Hamilton Biagas: Yeah

Todd Grindal: So the federal government, recognizing this, provides support to policymakers, to teachers, to state agency officials, on how to do all the things that they want them to do. So, for example, we run the Center for IDEA – IDEA is the Individuals with Disabilities Education Act – Early Childhood Data Systems. It's called the DaSy Center.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: And in the DaSy Center, we are talking every day to the folks in state agencies who are responsible for implementing the Individuals with Disabilities Education Act.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: And so we have expertise on, what does the law say? What do the regulations say? And what does research say about what's going to help kids?

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: So we do that in that space. We do similar work in the regional education lab, Appalachia, but that's more focused on K-12, where we're hearing from people within the Appalachian region about what are their needs of practice today. What are the things that they have questions about? If we only knew the answer to this, gosh, we think we could get better at serving our kids in the following ways.

Todd Grindal: And so we'll provide a mix of research and technical assistance, providing that information, to help them do their jobs better.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: There's one last thing. There's one last aspect of what we do that we don't talk about as much, but we also are involved in developing new solutions. That can be, helping to develop new curricula, new ways of teaching.

Todd Grindal: I know my colleague, Krystal Thomas is doing lots of work thinking about, 'How do we support teachers and provide curricula for teachers in the mathematics space to have more culturally responsive mathematics curricula?' And so we're helping to tweak and to do those things. We're also looking to develop tools that educators can use to improve their practice.

Todd Grindal: So, my colleague Nonye Alozie has been working with our colleagues in the other parts of the institute who do artificial intelligence

Kori Hamilton Biagas: Oh.

Todd Grindal: and analysis of video data to be able to track and measure the levels of collaboration between children in classrooms. And so, we do all four of those things: research, evaluation, technical assistance, and development. But it's all focused on those questions of, 'How do we improve access? How do we improve outcomes for students?'

Kori Hamilton Biagas: So how are you able to do all of this work?

Kori Hamilton Biagas: You know, who are your partners? Who are your clients? How are you, kind of, coming into this work? What are the entry points that you're using to provide this technical assistance, the research, the evaluation? I'm sure there's multiple pathways for entry.

Todd Grindal: Yeah. It's a big mix.

Kori Hamilton Biagas: Mm hmm.

Todd Grindal: Part of it comes from contracts

Kori Hamilton Biagas: OK

Todd Grindal: where either state or federal government says, 'Here, we've got this question. Can you go answer that for us and answer it for us, please? In exactly the way we want it answered, using these methods.' And we say, 'OK,

yeah, we'll do that.' Some of it comes through partnerships with commercial entities, where I think when we see a nice fit in terms of the mission of the entity, and it really speaks to the "why" questions that we ask ourselves about every project.

Kori Hamilton Biagas: Mm hmm.

Todd Grindal: Why are we doing this? Why is this worthwhile? We'll partner with them. We get grants. From time to time, we'll apply for grants that do that.

Kori Hamilton Biagas: Mm hmm.

Todd Grindal: And then the institute, because we are a research institute, as a nonprofit research institute, we reinvest in internal research and development.

Kori Hamilton Biagas: I see.

Todd Grindal: So I've had, I've worked with our speech technology and research lab, that does this fascinating work on speech recognition and parsing aspects of speech and using artificial intelligence to identify what people are talking about and how they're feeling. We've worked together using internal research and development money from the Institute to understand how those tools could be applied to support teachers.

Kori Hamilton Biagas: Wow!

Todd Grindal: How could we take that kind of information, provide it back to teachers, in ways that can help them do their jobs better? And it's those sorts of things, which are still like, they sort of start with, they're like "what if" questions. What if we did A, B and C? Is that worthwhile? Is that going to help anybody, where having that internal funding helps us to answer those questions? And sometimes the answer is, that's a bad idea. Don't do that.

Kori Hamilton Biagas: [Laughter] Right?

Todd Grindal: But sometimes the answer is, oh, wow, we might actually build something here that's really useful.

Kori Hamilton Biagas: Mm hmm.

Todd Grindal: So now let's talk to the National Science Foundation

Kori Hamilton Biagas: Yeah.

Todd Grindal: or let's talk to the Department of Education.

Kori Hamilton Biagas: The old line from Sesame Street: "I wonder. What if? Let's try." [Laughter]

Todd Grindal: Yeah. I like that, Kori. [Laughter] I think I'm going to bring that back into our meetings and our planning conversations.

Kori Hamilton Biagas: Yeah. It's like you answered those questions. If, when you get to that "what if" part, you realize, oh no, probably then you don't go to "Let's try." But if you say, okay, 'Well, there's a possibility here. Let's see what we can do.'" I wonder. What if? Let's try. Absolutely. Wow. So that's such a special kind of magical space to be in, to be able to have access to the incredible research and innovations that are taking place within the institute and to leverage that knowledge in trying to find solutions for the education setting, and then to also have the opportunity to partner with various entities, whether it be federal agencies, state agencies, or other commercial organizations. That really makes me think that the SRI education portfolio has to be beyond diverse.

Kori Hamilton Biagas: Because the funding streams, the methods of innovation, the solutions you're trying to solve, are scaled at all different levels, right? And so one of the things I'm curious about is, if you wonder and you get to a good "what if" and you try, and the solutions are working, then what does the future look like? For you? For SRI Education?

Kori Hamilton Biagas: What would be, like, a dream?

Todd Grindal: Well, I think from a project perspective, we look to think about things that we can get into practice. So, if we're successful, our ideas, our tools that we're developing are in the hands of teachers are in the hands of parents, of students, and they're making the task of learning and teaching more effective, more joyful, and going deeper.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: One principle that has governed all of our technology work, and that we come back to on every project when we're talking about education technology, is we are not replacing the humans.

Kori Hamilton Biagas: Yes.

Todd Grindal: It's not what we want to do.

Kori Hamilton Biagas: Right.

Todd Grindal: Because education, learning... I subscribe to this model that learning in schools happens at this intersection of content, teacher, and student. And you can't cut off one part of that triangle.

Kori Hamilton Biagas: The interpersonal is necessary.

Todd Grindal: Yes. Humans are critical to raising humans.

Kori Hamilton Biagas: Yes.

Todd Grindal: But there are aspects... One of the things we're looking at is, there are things that are uniquely human – these interpersonal things that are uniquely human about learning – and often teachers and parents as well, a lot of their time is engaged in tasks that aren't that uniquely interpersonal human part of learning.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: And what we look to do with our tools, is to take those things that are time-consuming or hassles and that keep you away from that connection. With young kids, we think about it as the serve and return between child and adult, back and forth around a given topic or content. Those things that keep you from doing that.

Todd Grindal: Let's see if we can reduce all the time you're spending on that, and give you insights that you, as the adult, can bring to those interactions.

Kori Hamilton Biagas: Mm-hmm. The intellectual volley, right?

Todd Grindal: Yeah. Yeah.

Kori Hamilton Biagas: Yeah. Which is also strength-building in a variety of ways, right? We're helping our young people to build that muscle, and that intellectual volley between the adult and the child is an integral part of that brain-building, that strength-building, that exercise.

Todd Grindal: And there's aspects of that that we do as humans, that we do naturally. You watch. People across cultures, across communities... You pick up a baby and you are going to coo and talk to that baby.

Kori Hamilton Biagas: Right.

Todd Grindal: Ninety-nine out of a hundred people are going to do that, right? Not because somebody's taught them to do it, because it is something about being a human and being with a baby.

Kori Hamilton Biagas: Right.

Todd Grindal: There are ways that sustaining and going deeper on that serve and return interaction with children are aided by instruction, that are aided by supports and insights that sometimes these technology tools can help us to produce.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: So, I think, getting back to your question of 'What is success?' I think success is when we are able to strengthen, when we know, and, at scale, we are able to strengthen that human-to-human connection.

Kori Hamilton Biagas: At scale. Say more about that. What does that mean, when we're able to do this at scale?

Todd Grindal: So the history of education, research, and innovation... It's a lot of things that we can show to work in one narrow context.

Kori Hamilton Biagas: Yeah.

Todd Grindal: And when we look to do them at a district level, when we look to go from the classroom to the district, from the district to the state, from the state to the country, things often fall apart.

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: Because this is a wide and varied country with tremendous diversity in who the students are, who the teachers are, the context in which people live. So we look to our activities, and I think this is in line with what the federal government is looking for, too, to go beyond these things that can just

work in a lab, the things that can work across contexts, can be useful in a rural community, in an urban community, are applicable in places where the majority of students are learning English as a second language

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: rather than just English language contexts. And there's some real challenges in doing that. And as I said, with some of our other work, sometimes we don't get there, but that is what we push to and what we aspire to in this work.

Kori Hamilton Biagas: Yeah, and some of that, too, for us in a researcher setting is about getting out of our own heads, in terms of, you know, what are we really trying to accomplish here? So are we so focused on ensuring that every single intervention is implemented exactly right so that it demonstrates the efficacy standards that we are hoping for?

Kori Hamilton Biagas: Or are we using the approach when we're scaling, in particular, of impact? We really want this to be something [that] people can use, and it's something that can be leveraged in multiple spaces, which means that as the researcher who's collecting the data and wants to know how our intervention is going, we may have to let some things go.

Kori Hamilton Biagas: Because in order for it to adapt in particular contexts, these ideas that we have that we created in our space, in our lab, in our conversations, may not be applicable. And so there's this ebb and flow, I feel like, between a researcher who's holding on really tightly to something they created and the scaling of that thing, which requires it to be more malleable and refined for particular contexts.

Kori Hamilton Biagas: Have you come across that in your work at all?
[Laughter]

Todd Grindal: Gosh, all the time. And it has led me and the folks I work with to institute this discipline of asking ourselves, 'How might we be wrong here?' You know, we think we found this and, like, 'What? Let's look at this again. Why might this not be true?'

Todd Grindal: I'll give you an example of one recently. So I mentioned, we've done some of this work with our tremendously innovative colleagues in the speech technology and research lab. And we were interested in how we can use

these tremendous tools, these innovative tools that their lab has on categorizing different aspects of speech to help teachers improve their practice.

Todd Grindal: So we measured a range of things. We measured their question-asking behavior. We measured their use of different types of praise. We measured their tone of voice and when they were excited or not excited. And then we went back and we looked at the data and we had, you know, a handful of teachers who said, oh, okay, well this group of teachers, these are the really good teachers, based on our metrics, and these teachers are struggling.

Todd Grindal: And then we said, ‘Well, why might we be wrong?’ And we looked and we found that all the teachers we classified as really good teachers were white.

Kori Hamilton Biagas: Wow!

Todd Grindal: And all the teachers we had classified as struggling were teachers of color.

Kori Hamilton Biagas: Wow.

Todd Grindal: And we realized that it is because the development of our indicators of what is good...

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: ...what is good practice, what is good language interaction, in this context, were so deeply informed by the perspectives that I bring to this as a white person and that the other people on the team brought to it, that what we were measuring was totally wrong. That what we were really capturing, in what our measures of quality, were measures of whiteness. So we went back to the drawing board

Kori Hamilton Biagas: Wow!

Todd Grindal: And we brought in new perspectives

Kori Hamilton Biagas: Mm-hmm.

Todd Grindal: to help us deconstruct this and say, ‘Well, no. We don’t want to measure the implementation of a particular cultural perspective. What we want to understand is what’s good for kids.’

Kori Hamilton Biagas: Right.

Todd Grindal: And so I think that’s a way where if we are not asking ourselves that question of how might we be wrong, what does this look like at scale, where we can create tools that are not just, like, unhelpful, but are bad.

Kori Hamilton Biagas: Right.

Todd Grindal: That are doing bad things.

Kori Hamilton Biagas: Right. Harmful. [Laughing]

Todd Grindal: Yeah. We’re not going to do that. We’re not going to do that. That experience of being able to catch ourselves in that, I think has been really helpful and informing not just my work when we’re doing technology development, but when we’re doing research and evaluation. How might we be wrong here? Not in the statistics. Like, we’re pretty good on those statistics. I know we’re right.

Kori Hamilton Biagas: Right.

Todd Grindal: But in the fundamental ideas that we are bringing to this and the questions that we’re asking, that is, I think, a space where we are trying real hard. And I think the field is as well, but we’re not there yet.

Kori Hamilton Biagas: We need to keep stretching.

Todd Grindal: Yeah.

Kori Hamilton Biagas: Mm-hmm. So how do people stay connected with you and the work of SRI? How do we do that? Or is it important for people to do that? I think we want people to follow our work and to be engaged with us. I think we have so many wonderful projects and tools and resources that people can really benefit from.

Kori Hamilton Biagas: So if people want to connect, what are the best ways to connect?

Todd Grindal: So we look to share our work in different ways that fit different audiences. So...

Kori Hamilton Biagas: I mean with you. How do people connect with Todd?

Todd Grindal: How do they connect with me?

Kori Hamilton Biagas: Yes, with you.

[Both laughing]

Todd Grindal: So I love talking to people. Just this morning I was talking to somebody who was a student that is interested in SRI, and we talked for an hour about a million different things. I love talking to people and, be they students or practitioners or other researchers, people can always, always email me.

Kori Hamilton Biagas: Okay. We'll put it in the show notes.

Todd Grindal: And I post on Twitter, honestly, a lot less than I used to. I think a lot of other people, that used to be a big place where I was sharing lots of our work.

Todd Grindal: But we have a really nice website at SRI with information on our projects that's connected to specific staff. And so I'd invite people to go there as well.

Kori Hamilton Biagas: Okay.

Todd Grindal: We're also, we're always at conferences, both practitioner and research conferences. So I invite folks to talk to me there. But email me. Email me. I love to talk.

Kori Hamilton Biagas: We'll make sure that we include all the different ways to stay connected with Todd and SRI Education in our show notes.

Todd Grindal: Awesome.

Kori Hamilton Biagas: It has been such a pleasure chatting with you this morning, Todd.

[Theme music starts fading in]

Todd Grindal: Oh my gosh. Yeah. Thank you so much, Kori. Like, can I do it again next season? Right? This is fun.

Kori Hamilton Biagas: Absolutely.

Todd Grindal: Alright. Good!

Kori Hamilton Biagas: And thank you all for listening to the SRI Homeroom brought to you by SRI Education, a division of SRI International. We'll talk again soon. Bye.

Todd Grindal: Bye bye.

Kori Hamilton Biagas: Thank you for joining us on the SRI Homeroom, produced by SRI Education, a division of SRI.

Our guest today was Todd Grindal, Co-Director of the Center for Learning and Development with SRI Education, and a lecturer at Harvard University. You can learn more about Todd and his work in today's show notes.

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[Theme music rises and then fades out]