Podcast: Preparing Students for Their Future

Listen as an experienced post -secondary professor and Dean of Computing and Data Science shares her insights as she assumes the position of the Head of School at a 7-12 independent school, the New England Innovation Academy. Dr. Durga Suresh-Menon provides a definition of innovation and discusses the need for curriculum and instruction to be continuously relevant. How do students prepare for what comes next? How do staff engage in the learning that supports their work with student?

Email Dr. Suresh-Menon: durga.suresh-menon@neiacademy.org

Learn more about the New England Innovation Academy here.

Subscribe to the Steve Barkley Ponders Out Loud podcast on iTunes or visit BarkleyPD.com to find new episodes!

Podcast Transcript:

[00:00:00.000] – Steve [Intro]
Welcome to the Steve Barkley Ponders Out Loud podcast. As instructional coaches and school leaders, you are tasked with guiding continuous teacher growth to create student success. This podcast looks to support you with strategies from experienced guests, as well as my own insights that I've gathered over the years. I'm thrilled to have you with us. Thanks for tuning in.

[00:00:30.000] – Steve
Preparing Students for Their Future. Today's guest is perfectly situated to provide insights on our need to be future-focused with our students. Dr. Durga Suresh-Menon has 20 years experience at Wentworth Institute of Technology in Boston, including roles as special assistant to the Provost, Dean of Graduate Education, and Dean of the School of Computing and Data Science. She focused on a culture of growth and development and ensuring a curriculum that remained relevant and at the forefront of technological advancement and industry needs. She led with a commitment to nurturing the next generation of tech leaders through a transformative educational experience. Today, she is the new Head of School at NEIA, the New England Innovation Academy, an independent middle and upper school with residential opportunities for students 9 through 12. NEIA has a mission that values innovation, collaboration, and belonging, along with a goal to prepare the next generation of innovators and entrepreneurs to pursue their dreams and shape a better world. Students there discover their passion and purpose. They innovate with impact, and they prepare for what comes next. Welcome, Durga.

[00:02:07.140] – Dr. Durga Suresh-Menon
Thank you so much, Steve. Thank you so much for having me here. I love the way you're able to weave what I have done to what I'm going to be doing.

[00:02:15.240] – Steve
Well, I'm totally excited about the information that you'll

share with us. I'm anxious to hear about the New England Innovation Academy and your plans there. But before we do, I'd really like explore some of the insights that you gained from your career at Wentworth. As I was reading through your background, I was trying to imagine the changes in technology that occurred during your tenure there and how you would work at keeping a curriculum relevant.

[00:02:51.420] – Dr. Durga Suresh-Menon
I know. I was in computer science all my life. I was a computer science professor, and I started at Wentworth in 2001. So programming had just become cool in a way. We had gone through Y2K. Technology was in the forefront. I would say that today it's different because a A 20-year-old understands technology as much as a 50-year-old, and the spectrum has become much wider and larger. I'll say that that is why NEIA was such an attraction to me, because it is new. Relevance is the most important thing when it comes to education, because if you stop learning, if you stop being in the forefront of whatever changes are happening – I am in computer science, so yes, technology, but I'm talking about it in terms of engineering, in terms of manufacturing, anything it is, it was the most important thing. How do faculty stay relevant as a professor? Forget what I'm teaching the students. If I was not relevant, I was not teaching the students what they could do when they found that job. I would say that it was the best, most exciting challenge as a faculty member and then as dean, because you then got to hire the next newer generation of faculty members who came in with the students.

[00:04:12.520] – Dr. Durga Suresh-Menon
When I started, it was just computer science. You talked about computer science. Then it became computer science, networking, information technology, cybersecurity, data science. You think if you look at it, it's not just the field, it also became how it started branching out. That was the innovation in computer science and engineering. Today, is there any part of any

industry that technology does not touch? Which basically means that no matter what field you're in, whether you are in manufacturing, supply chain management, trucking industry, technology drives everything. Surgery – as somebody who's been a recipient of the robotic arm surgery, I know the relevance of it. I was so excited when I found out that a robot was going to operate on me. But that's technology today. I feel that that's what prepared me to look at this job differently. Because if somebody looked at me, they'll say, I'm a higher ed person. So what am I doing in secondary school?

[00:05:19.240] – Steve
I want to check a piece with you because my mind is just jumping with connections to my work because I've been in this field for 50 of education, and 35 to 40 of those years in consulting and working with schools. When you talked about how it went from the beginning pieces of coding and through all the other components. The word that was going through my mind was complexity increased. Is that a fair term?

[00:05:53.880] – Dr. Durga Suresh-Menon
100%. That is something that we talk about in NEIA. The world is It's complex. How do you break it down to our students? I'll say students in general. I won't put them in any age group. Today, the way that a four-year-old understands in Pre-K, how something works, is extremely different than how we went to school. Somebody was making a joke about, one of my friends was making a joke to their child about, "We use the abacus. We learned how to use the abacus." We knew that students today don't need to learn how to use the abacus. I was not allowed to use calculators growing up. I used a logarithmic book to look at what was the log of something. That's not this generation anymore. Absolutely everything is more complex. How do you break down that complexity? How do you prepare your students for a complex world?

[00:06:55.220] – Steve
I carry the same over then in my work that – the phrase that I

use is, there is no mountaintop to teaching or leading. That you're climbing the mountain and you see a cloud there and you think on the other side is the top, but when you get through there, there's another piece. If I look across all the years I've been in education, the outcomes that we're looking for students to gain have become increasingly complex. Then the teacher needs to be in that same continuous learning cycle in for the teacher to work with students with a curriculum that's relevant and an approach that's relevant.

[00:07:38.240] – Dr. Durga Suresh-Menon
Absolutely 100%. I remember when I looked at your chart of how professional development feeds it. I love that you put the student outcomes on the top, because that's where we are all building to, because if there are no outcomes that are relevant, appropriate, something that breaks down complexity, then we are claiming that we have the mountain top, which is not true.

[00:08:02.700] – Steve
I wanted to ask about the word innovation because that's one that frequently doesn't get used positively in education, to tell you the truth of my background and experience. How do you define innovation? And across your career working in those areas, what does it mean to develop innovation within students?

[00:08:25.700] – Dr. Durga Suresh-Menon
That's a wonderful question to ask. I think I'm an engineer by training I always like to profess this. I always give the engineering answer, and I've held strong to it throughout my career. I think that's a very good way to define it. It is creating something novel. That does not mean that it is new. There's a difference between invention and innovation. Invention is absolutely did not exist, you created it. But innovation could be that, or It could be there was something that already existed and you made it better. Who did you make it better for? I think that is the answer that is most

important. I think that is where we all diverge in thought and in the way we implement it. I believe that innovation is creating something new that is useful. I think at least that is the ethos of how NEIA does it. Whereas in college, when we talk about being innovative, it is about what can you create that didn't exist before? I always say that when you get a PhD, that is the first question you ask yourself – you can't get a PhD if you didn't create something novel. It didn't exist, and I created it, and that is my thesis.

[00:09:46.660] – Dr. Durga Suresh-Menon
That's one way of looking at it. But that was an innovative approach. Hey, this is what existed. I'm in the security field in computer engineering, and I did something with network security, and I created a novel approach to solving a problem. I'm hoping that the next generation of PhD students will come take mine and then extend it further. I think that is what I call innovation.

[00:10:08.840] – Steve
During your time at Wentworth, looking at students coming in and entering programs, what were some areas that you saw as critical and important background pieces for students to have in order to be successful as they entered and worked in your program there?

[00:10:30.560] – Dr. Durga Suresh-Menon
That's another great question, Steve. People usually will say, especially us who come from being a dean, a lot of people will say, Math and science, we needed them to be prepared for math and science. I would say even more important than that, was two elements that I saw as most important. Number one, and I always say this, and I'm never going to change my mind about it, is self-advocacy. Can a student self-advocate? And that is a skill. And again, in higher education, we always talk about going back in the pipeline. You'll hear this pipeline word all over the place. In higher education, we talk about the pipeline. "Oh, how do we prepare them better? Oh, we need to

go back in the pipeline. And math and science needs to be bolstered behind in the pipeline." And so this pipeline is your K through 12 education. And so self-advocacy has been one big thing that I've seen. And the second one is the ability to communicate. Because if you don't get something, math and science, you should be able to communicate it and advocate for yourself. One of the big reasons that I saw the importance of being a part of secondary education was exactly the answer to your question.

[00:11:46.820] – Dr. Durga Suresh-Menon
We kept talking about the pipeline and how we started seeing this gap. There is high school, and then there is college, and there is a gap in between because we want that skills bridge. Not just the pandemic. I think we started seeing it even a few years before that the gap was actually widening. We started saying that, oh, they're not coming prepared in this aspect of mathematics. At Wentworth, we have a director of first-year math. It was very particular that we wanted to improve that. We were seeing that the physics grades were not good. If your grades were not good in your first year, the probability of you completing college dropped dramatically. We would talk again about the pipeline, about creating opportunities for our students when they came in and scaffolding them, but that the pipeline needed to work on it. I think there is a part of independent school education and public school education that is steeped in tradition. That was not being innovative. You were looking for that innovation. I always joke about it to my family and friends that I actually found a place that has innovation in its title, its New England Innovation Academy.

[00:13:00.000] – Dr. Durga Suresh-Menon
That's why it was created. In a market like Massachusetts, where we are steeped in one of some of the best independent schools, and I think our board chair made a joke that it might be the largest amount of independent schools everywhere in the world, they created a new school, a brand new school. We are

just starting our fifth year next month. How do you do that? It's because your focus was innovation, entrepreneurship. When we talked about innovation, we were talking about these aspects of being human-centered design. Everybody gets very confused when we say human-centered design. They're like, What is human-centered design? It's just putting people at the center of things. It is not human-centered, it's human-centered design. Because the Design of what you create or what you innovate puts people in the center. At NEIA, they started by putting the students in the center of things and creating, whether it's a curriculum or whether it's the way the culture was created was around innovation. I think they understand that gap. We are talking about that gap between high school and middle school to high school to college. We want that gap. We want to shorten that gap.

[00:14:12.890] – Dr. Durga Suresh-Menon
And COVID did not help. It's very easy to blame COVID for a lot of things, but COVID did affect our children. It affected… I remember having our preliminary conversation. We talked about how it affected adults. We talk about the students. What about the teachers? What about the parents? It created havoc. And these effects are going to last for the next 13 years, they said. So how do we then prepare students?

[00:14:42.020] – Steve
So it's the mission of NEIA that attracted you there?

[00:14:46.980] – Dr. Durga Suresh-Menon
Yes. So there was a lot of things, but you have to come and see the place. I still remember the interim head of school had said something like, It's a magical place. And I was like, please understand, I come from higher education. We do not say college is a magical place. [laughter]

[00:15:02.360] – Dr. Durga Suresh-Menon
[laughter] Sounds like Disney World.

[00:15:05.540] – Steve
[laughter] Exactly.

[00:15:05.960] – Dr. Durga Suresh-Menon
So when he said that, I joked about it and I was like, what? And then I went and looked at the place and a student gave me the tour. So NEIA – students give me the tour. We have student ambassadors, and this was a graduating senior. He was going to graduate in May. In January, he's giving me the tour. At some point, I stopped and I looked at him and I said, this is not how college works. You're not going to get this in college. I still remember coming back, finish the interview, got in the car, I called my sister and I said, Oh, my God, it's a magical place.

[00:15:43.580] – Steve
That's a good thing.

[00:15:45.540] – Dr. Durga Suresh-Menon
Now, it's a good thing. Now, I try my best not to repeat it, but if you stay there for long enough, if you know the way the school was built, I say this purpose and intentionality is in every wear at NEIA. It's the beauty of being a new school. I think we totally and utterly embrace that we are new, and which means that we break a lot of the norms and traditions that people are used to. You come in and the first thing you have to do is you have to look up, and you will not believe that you are in a school. I feel like I always say, I feel like I'm in a spaceship. There's a lot of intentionality and purpose in everything at NEIA. I understood what my place would be, how could I contribute. I said this about higher education, and I had adults – these students are just amazing. I always say that I should give out a shout out to Marcus, who interviewed me, and he converted me into wanting to come and be his head of school.

[00:16:52.800] – Steve
That's great. I'm currently working with a new client that's a

high school building their portrait of a learner. A portrait of a graduate, actually, is where they're at. You've given us two critical things that you said students should bring into the university with them. Are there a couple of other things you'd add to that list of a portrait of a graduate for a high school to put together? Are there some that are already built into the mission?

[00:17:28.380] – Dr. Durga Suresh-Menon
Yes. That's a great question to ask. I asked that question of the graduating. We actually talk to them. We do exit interviews. As I was coming in, I met with the entire graduating class. One week before they graduated, I met with them. I asked the most important question. I said, What did NEIA teach you? How did NEIA prepare you to go to college? One of the students said, Oh, NEIA didn't prepare me to go to college. NEIA just prepared me to go and do whatever I want.

[00:17:55.380] – Steve
Powerful.

[00:17:56.300] – Dr. Durga Suresh-Menon
That stuck with me. This student came from Switzerland to Massachusetts and is now going to USA. He said, "I'm ready for whatever lies ahead." I was like – and this is not just the teacher. There's this teacher's part, there's this college counseling part. Then on top of all of this is, we call it the learning engagement piece. We work with students in many different ways. It's so important not to prepare them just for college. I feel like we need to prepare students for life. I think that's what I heard. I think when you prepare them, then you send them off to college, you don't have to worry about them in the way of, Oh, my God, how are they studying? How are they reading? How are they doing their laundry? You don't have to worry about it. They figure it out. I think that is the preparation that we need to do. In our boarding program, our head of community life was talking about how there is a way of reminding students to do their laundry once a week. It's a

part of the community life. You teach them these things. And so small things matter, and I think intentionality matters.

[00:19:11.660] – Dr. Durga Suresh-Menon
And I think that's what you need to give your students when they get ready to go to college.

[00:19:16.060] – Steve
So I have a question that may be unfair based on the length of time you've had in your role. But in my work with schools, and especially when I'm working with professional learning communities in schools, one of my favorite questions to get people to ask is, what do the students need us to learn? So when teachers are sitting and looking at student outcomes or looking at student work or student behaviors, there's something the adults need to learn in order to play the role of being the support to students. I was wondering, as you look at the goals that you're working on as as you step into your role there at NEIA, if you're doing some pondering as to what adults will need to have in their learning package in order to move ahead for students.

[00:20:15.660] – Dr. Durga Suresh-Menon
It's such a good, thoughtful question, Steve. I think I spend a lot of time on it. I think at this point, at this stage, as I get ready to understand N more as the head of school, I'm having those conversations. We have a chief academic officer who's extremely focused on exactly answering that question. It is not enough to say that we are innovative. We need to be able to measure how we are being innovative, because if you're not measuring it, then what are you doing? I think the professional development piece is so important. We actually have a director of professional development, curriculum and professional development, where that is the job. There are a group of people that sit together and they say, "How can we help our students?" Of course, there's this very important piece, and it's a no-brainer. It's the empathy piece of things. It is a part of the conversation every day. Empathy is

a part of the conversation every day. There is the innovation piece about the curricular innovation that we talk about. NEIA does something, and I just got introduced to it two days ago, so I'm flabbergasted with how much thought went into it.

[00:21:26.520] – Dr. Durga Suresh-Menon
The grading at NEIA is not summative. It is a competency-based grading. Then our chief academic officer said, well, it's technically like a mashup. I said, oh. Then he had this beautiful presentation. He's talking about it all over the country. He's talking to his colleagues all over the country. Learning from others is, it's not one thing. They took standards-based testing, they took competency-based testing, they took some traditional testing, and then they created a hybrid that works for the student that comes to NEIA. Every teacher at NEIA uses the exact same grading scheme. So you don't go from one class to another and you're like, oh, in this class, I'm graded to 10, and that class, I'm graded to 100. It is that. I think that is very intentional, so that's very important. But I love that you asked that question. I think about it every day. I have notes, and I'm learning more. I think right now I'm on the listening and learning piece. We are actually going to be doing some strategic planning, and this is going to be an important pillar. Innovation is one of our pillars. How do we evaluate and continuously grow to that pyramid of student outcomes?

[00:22:42.740] – Dr. Durga Suresh-Menon
How do we do that? Right now, I think they're doing a great job. I'm very proud of the work that they're doing, but there's always scope of improvement. I think that's what we're going to be talking about in the coming year.

[00:22:55.860] – Steve
Well, you've done exactly what I was hoping you would do when I invited onto the podcast and I think I need to plan a year from now to check back with you.

[00:23:08.600] – Dr. Durga Suresh-Menon
I would love that, because I would like to answer this question.

[00:23:12.560] – Steve
Well, I can tell that you're a learner. And your staff and your students will benefit from you being a learner. You're going to learn a lot this next year. I'd be just delighted to hear what you learn.

[00:23:34.180] – Dr. Durga Suresh-Menon
Steve, I would absolutely love that. I think it is a transition like no other for me. I'm actually also going to professional development activities for me as a head of school. I'll actually be going in a couple of weeks to the Institute for New Heads. Then I'm going to all the conferences that are going to teach me about different aspects of NEIA – middle school, high school, the boarding program, the residential life program. How do you then integrate residential life and be programmed together? Because in a lot of schools, they're one or the other, and there's very little. We want to have a balance. How do you do that?

[00:24:15.440] – Steve
Terrific. Well, what's the best way for listeners to check in, follow up with you, ask questions that they might have?

[00:24:24.960] – Dr. Durga Suresh-Menon
Please follow up and ask questions. Please help me learn more for all the head of schools out there and anybody in independent schools. I can be found on LinkedIn, Durga Suresh-Menon. New England Innovation Academy is neiacademy.org. Both of these ways are easy to find me. So please find us, ask questions, and connect.

[00:24:50.400] – Steve
All right. We'll put those links into the lead-in to the podcast to make it easier for folks to go back and find you.

[00:24:56.660] – Dr. Durga Suresh-Menon
Thank you so much. Absolutely.

[00:24:58.500] – Steve
I really appreciated it.

[00:25:00.320] – Dr. Durga Suresh-Menon
Thank you so much for having me, Steve.

[00:25:04.120] – Steve [Outro]
Thanks for listening, folks. I'd love to hear what you're pondering. You can find me on Twitter or LinkedIn at Steve Barkley, or send me your questions and find my videos and blogs at barkleypd.com.