THE BROOKINGS INSTITUTION

WEBINAR

MAKING SCHOOLS WORK:

HOW THE SCIENCE OF LEARNING CAN HELP STUDENTS THRIVE

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Rebecca Winthrop [00:00:16] Good morning. Good afternoon. Good evening, everybody. Thank you so much for joining us to this exciting event, "Making Schools Work: How the Science of Learning Can Help Students Thrive," which is a book launch of my friend and colleague Kathy Hirsh-Pasek, along with her co-authors. It's a, it's a very diverse group of coauthors from many different perspectives: parents, teachers, administrators and researchers. Roberta Golinkoff, Kimberly Nesbitt, Carol Lautenbach, Elias Blinkoff, Ginger Fifer, and we will get to hear from a couple of them today. I just wanted to kick off and say why we are so pleased at the Center for Universal Education here at Brookings to be doing this book launch.

I think it is incredibly timely, not only in the U.S. as we come off of some massive debates politically about the future of our country. But also, as we think about what does a, quote unquote, "post-COVID world" look like in in the education sector. And for us, for those of you who don't know the Center for Universal Education very well and are joining, for us, we have been dedicated for a long time to thinking really deeply about this idea of system transformation and how can we really have education systems and education ecosystems in and out of school and communities that work seamlessly with with each other, that build competencies for work, life and citizenship in young people. And we we we at the center work on many, many levers to do that, to try to close the equity gaps in what we would call the relevance gaps, relevance in terms of making sure the skills and competencies young people are developing through their educational career are going to serve them well in those goals of work, life and citizenship, from teachers to scaling to looking at innovative models to looking at technology, etc.. Our team is based, we have a large team across 25 countries and we work in more. We work in the U.S., yes, but across 40 countries in the globe. And so a lot of what we do is sharing good ideas across borders.

And one of the things that I was so excited when Kathy's book was coming out and said, let's, be great to do a book launch is because it really addresses a sort of burning debate that we see in the U.S.. I certainly see it and we see it in other countries, which is almost becoming a dichotomy in some ways between those who say post-COVID, we need to double down on closing the gaps in learning loss that might be high dosage tutoring discussions in the U.S. and then others who say no, post-COVID is the time to deeply transform systems and make sure we attend to students well-being and holistic outcomes, especially social, emotional learning or whatever term you choose to use. And I've been seeing sort of a dichotomy of people arguing you can't do both. And one of the reasons I love

this book is because they say, yes, you can, and here's some evidence and it's very practical. One of the things we like to personally I like I'm always drawn to is this idea of a third way. We've done a lot of work on this idea of leapfrogging. How do you accelerate the pace of change to close equity and relevance gaps? And it is possible to do both. And there are examples around the world from our work on leapfrogging inequality in the most remote, difficult context, if you can shift the mindset and the perspective of how you get the education job done and put the pieces of the education puzzle together differently, you can do both. And this theme of in the book of shifting, shifting of mindset, not curriculum, which is extremely hard to do, but actually administers sort of red tape bureaucracy less hard to do than doing a curriculum review is, I think, really exciting and holds real promise.

And so with that, I want to say welcome to all our panelists who you saw on the title card. What we're going to do today is we're going to have two parts. We are going to open up with a conversation between Pasi Sahlberg, who is a good colleague and friend. He's a Finnish educator, teacher and author. He wrote the foreword to the book. He's quite influential in many countries around the world. And in dialogue with Kathy Hirsh-Pasek, you've seen, you've seen on the event page everyone's titles and names, you've seen on the title card as you started the event, everybody's titles. So I'm not going to repeat those. But after that dialog and conversation, we are going to move to a fantastic panel moderated by Angela Duckworth, who is coming off a sabbatical to join us. So we're deeply grateful for her. And a huge thanks to the panelists, Robert, Carol, Eduardo and Kathy for being with us today. Angela will moderate a dynamic conversation between the panelists and then take a couple of audience questions. Please feel free to submit them. Hashtag making schools work. And over to you, Pasi and Kathy. Thank you very much.

Kathy Hirsh-Pasek [00:05:35] Thank you so much, Rebecca, for your introductions and for being here today. And I can't tell you, Pasi, how excited I am that you are going to frame the program for us. You've been thinking about this a long time. I know you have a holistic view of education that has been revolutionary around the world. Tell me what's going on around the world in education and why is it so desperate that we need to do something now?

Pasi Sahlberg [00:06:06] Yeah. First of all, Kathy, thanks so much for, for having me this in this session. I think it it would have been much better to be there in person but on the other side of the planet now and that's why, we do what we can do. But I think the important notion globally is that we, when the when the pandemic arrived 30 months ago, we thought that this will be, this will be the time

to really transform and look look at education in a different ways. And we have in a way, we have cleaned out much of the memory we had, what the education was before the pandemic. And obviously, you know, we have learned a lot about things during the last thirty months, about the remote learning, about the resilience and wellbeing and many of those other things. But one thing I'm really worried about, that people begin to kind of ignore or forget is that we had many of these issues in global education far before the pandemic came around. For example, the very deep, deeply rooted, widely spread inequalities in education that many people seem to think that these inequalities that we see now in many parts in the United States and here and Australia and Finland, that they are because of the, you know, somehow linked to the pandemic. I think it's very important to, you know, keep this in mind.

We also had almost 300 million children not in school before the pandemic. And it's the same thing happening now. We have actually the larger number of young people out of school right now. Many of them did not return to school when that, when the schools were, school gates were closed and and reopened recently. And then, of course, we have this declining trend overall globally that the the learning outcomes, especially in in the areas that are measured frequently, the literacy and mathematics and science are not getting any better. So so I think that, you know, that the picture is fairly grim in the sense that it's difficult to find good news in, when we look at education, you know. Good question is, Kathy, to ask then what's wrong, what's going, what are we doing wrong? But I think that the answers to this and similar questions cannot be found by looking at just what has happened during the last couple of years. I think we— we need to go back to the the fundamentals of education. What is education for and what is this human aspect, the social side of education? I think the that the book that you have written is is a very good, good call for a different type of thinking, reimagining education so that, you know, how we can bring more engagement, more— more well-being and more joy into into the classroom.

So I think, you know, anybody who is working in education, I guess most most of you following this this session are doing this. You know, we are in a situation where it's very difficult to actually know how to move forward, clearly, other than saying that, you know, we need bold and big thinking that just, you know, doing a little bit here and there in education doesn't help anymore. So— so we have a challenge. But— but luckily, we also have great people around the world, you know, working on these things. And amazing things are happening in different parts of the the world right

now. You look at Africa or Latin America or or Global South, not only these places where education has been traditionally been valued as a as an important thing. So— so we have a lot to do, but we also have a lot more wisdom and information and experience how to move forward.

Kathy Hirsh-Pasek [00:09:50] Thank you so much, Pasi. And we have argued that using the science of learning what we've accumulated in the past 30, 40 years, using what we know, there always going to be gaps in what we know. But I think we know a lot right now and you've put them to work. I just wondered if you'll give us a glimpse of what might lie in our future if we do apply the science.

Pasi Sahlberg [00:10:16] Yeah. Yeah, absolutely. And I think it's you know, what we have learned from— from that time during the pandemic is that that just like in medical and health, people were able to keep us relatively healthy and sane and navigate through this pandemic by relying on science and best evidence information. I think that this is what we need to continuously do in education. Education is a little bit different because there's so much different evidence. We still debate about certain things, like, for example, is it better to teach children using direct instruction? Just tell them what they need to know? Or is the active learning and engagement more important? So. So the often the science and evidence that we use in education is kind of a complicated and mixed. But I think, you know, we are beginning to understand much more now about the the important link between children's well-being and health and and their learning and education in school. I think your your book makes this this very clear. We are much more open now to accept the importance of social and emotional learning, not just the academic stuff.

And, you know, if there's one indication to this it's that international organizations like the OECD is is leaning towards this type of thing that would not probably be possible ten years ago when when there was so much emphasis and and attention to just mathematics and and reading and science. But then I think one one thing that we really are beginning to know much more now, again, because of the evidence and the science is the the importance of equality or equity in education, as we call it. And this is this is, again, a big theme in your own book that if we really want to improve education systems performance, like at the level of the states or districts in the United States or nations in the rest of the most of the rest of the world, then I think the the key thinking needs to be to strengthen the equity base or equality of of not only equality of access to good education, but also the equity of education outcomes. And and, you know, if we take this to heart that equity, equity and

excellence actually work hand in hand in educational development, that would— that would be a big step forward. We still we still see governments and politicians debating whether equity is is the equality or excellence, is the the more important thing in development. I think we need to to start to to understand that these two things work hand in hand and that the best education, the world class education systems are actually those that understand how to you know, how to strengthen equity and enhance the quality of education outcomes simultaneously. And this has been a big theme actually in many parts of the United States already.

But but this is one of those post-pandemic things that we really need to sit down and ask ourselves that what does it mean? What would it look like, what what we can do and and avoid the the the the conclusion that sometimes here that it's all about teachers, that, you know, teachers just need to teach harder and longer or that it's all about kids, that the children need to, you know, try harder to succeed because equity and equality in education is much more about that. It's about supporting and addressing those inequalities that often go outside of the education thing. And that's, again, what makes it more more complicated. We we need to look at wellbeing and health as well as many other youth related issues in our communities if we want to have better education.

Kathy Hirsh-Pasek [00:14:04] Well, thank you for that glimpse and you have set us on our way. Thanks so much, Pasi, and now it's on to you, Angela Duckworth.

Angela Duckworth [00:14:17] Hi. I'm going to try to get my video working. Thank you so much. I also want to invite our panelists to join me on video and audio. I love that introduction because if there's anything that, to me makes this book special, it is a both and book not, not an either or book, you know, not either equity or excellence, but both equity and excellence, not either well-being or academics, both well-being and academics and so on. This panel is going to have some questions that are prepared in advance that I get to ask. But I also want to encourage the audience to continue to be curious, and I will manage time so that in the last ten or 15 minutes of the hour, we'll get to some audience questions. Kathy, Carol, Bob, Eduardo, thank you for being in conversation. Kathy, I want to begin with you and ask you this question. In your view, what is the current state of public education as you see it? Where are the problems? Where are the opportunities? And and finally, you know, when you wrote this book with your, you know, of course, your esteemed collaborators and coauthors, like, but what were you collectively trying to achieve?

Kathy Hirsh-Pasek [00:15:38] Well, thanks, Angela.

Angela Duckworth [00:15:39] That was more than one question, but it's a compound question.

Kathy Hirsh-Pasek [00:15:42] Kind of a deep question. But I'm going to go at it. Look, I think we got a warning way back in 1983 when a Nation at Risk was published, and they told us we really needed to be concerned because we were no longer preparing students for the knowledge age. We were still preparing students for the Industrial Age. And the Industrial Age is kind of a bygone age. We're still in schools around the world doing what King once called sage on the stage kind of teaching, where the kids are passive, you know, and the great teachers are dispensing knowledge that's supposed to somehow seep into their brains. And then they need only regurgitate it onto some tests that formulate small, narrowly construed answers. But I think that's not how the world works anymore. In fact Peter Drucker once said that in business, if you continued to do that, you would end up the way the pterodactyl. And I fear that that's what we're doing with education as well.

So we could spend a lot of time on how in the last 40 years, and let's just think that the last 40 years we now have computers in our houses, we didn't have them 40 years ago when they said it was dire. Right. We now have information in our pockets where we can look up everything in a matter of seconds. We didn't have that 40 years ago. So it was dire. 40 years ago. I don't even know what the expletive is that we should be using now for what's going on. And the result has been over the years, and I think Pasi alluded to this, to handcuff teachers, and that's probably not the way to go. I think more respect for teachers, recognizing teachers are professionals, not trying to dictate everything. We don't do that with our dentist or doctor. Right. We we know and respect their professionalism.

So let's move forward. So in this book, we try to make a bridge between what we know about in the science of learning 40 years, of really trying to understand how do human brains learn and ask an incredible question: what would happen if we taught in the way that human brains learn? I know it's almost shocking, but a lot of the science of learning has not seeped its way into classroom practice. So this book was an attempt to say, okay, we're going to come together by using the latest science, which I know Bob and Eduardo have already given us so much to think about in the science. And we're going to work directly with school administrators like Carol, and we're going to work with teachers, master teachers, and we're going to sit around a table and we have to say, what do we do? Not just to write another theoretical piece about what's wrong in education, but to say, what can we do that is positive, that can change teacher mindset, that doesn't add to the bottom-line budget, and that

can help all children succeed, and even more so at the end of the day. Bob, I know you and I could, like sing duets together on this, but what we're looking for is more joyous teaching. I mean, teachers, remember why you went into teaching in the first place, and deeper learning so that kids don't just memorize but could actually get a new problem somewhere and go, oh, I know how to apply something I learned to this new problem. Voila. So joyous teaching, deeper learning. And the book actually shows you in classroom, in school districts, how you can do it.

Angela Duckworth [00:19:24] Thank you so much, Kathy, and Carol, I have to say that one of my favorite things about the book really is and it's unique, I think, in this way, is that it's so deeply rooted in the evidence, in the latest science and yet just so practical as well. So I want to turn to you now and ask you about Michigan and to tell us the story of, you know, what you see and have seen on the ground up close and how you helped to catalyze education reform there.

Carol Lautenbach [00:19:55] Great. Well, thank you, Angela. And thank you to all of the panelists as well. Your— your innovation is really inspiring. So what Godfrey Lee saw in our system were inequities, gaps in traditional measures of achievement, in discipline referrals, even in attendance, and graduation rates, persisted. And years of these kinds of results contributed to frustration, a deficit mindset focused on fixing problems over developing potential. And it became more and more clear that we just couldn't intervene our way to equity. So a team of visionary people like all of you on the screen today from our community, from our administration, our teaching staff, our students, families, cultural, philanthropic organizations came together to consider a really bold idea what might happen if we created a system that was built on students potential strengths and interests, and what could that look look like? So we put assumptions aside and began a design thinking journey. We listened with empathy to find patterns in what our community was saying about their own hopes and dreams and what brought them joy. And what we discovered was that those broad transferable skills that are supported by research in the learning sciences, what we call the six Cs, and you'll read about them throughout the whole book that describe the joyful strengths based system that we were looking for.

Angela Duckworth [00:21:31] Thank you so much. And I will say thank you also for the, you know, six C's pneumonic, because I think it's a way of actually carrying it around in your head. And Bob, I'm going to turn to you next. Right. So as as we all know, you were the immediate past dean of education in one of, I have to say, one of because it's not my university, but maybe you could even

argue it, the top university for education, University of Virginia. How would you, Bob, describe what you see as the contemporary challenges and feel free to be as up to date as possible, I know there, you know, breaking news, most of it bad, for for the goings on in K-12 education. But love to hear your perspective on all of this.

Robert Pianta [00:22:21] Thanks, Angela. It's great to be here. Kathy, I think you may have invited me to sing a duet, so I will, I will refrain from that so that people want to listen to the rest of us. I have been thinking about this a lot lately, and a lot of it is in the context of reading a whole slew of white papers, op eds, blogs for the last couple of months that are informed by a whole group of stakeholders, not just in the United States, but around the world. And every one of them raises serious concerns about education. And they converge on the conclusion that public education is a force for opportunity and society is eroding rapidly. This should really worry us in the same way that climate has worried us for some time. The basis for that conclusion is not just the pandemic, although the pandemic has accelerated that, but it's culture wars. It's the toll of accountability, narrow standards, longstanding depletion of the workforce. And as Kathy and Carol have reminded us, the failure to reflect scientific progress in child and adolescent development. And all of those papers recommend the same thing right now. They recommend targeted tutoring for learning loss, revising assessments to improve accountability, counselors for mental health, increasing parents options for choice.

In a recent article in response to the NAPE results, Marty West, who I have great respect for, said the only solution he could recommend would be more instructional time. And I worry deeply about more of the kind of time that we offer kids now. We learned a lot from standards-based reform. We've learned to use data. We've learned about levers that can drive changes in practice. And we saw remarkable changes in practice as a result of NCLP. So we know the system can change. We we should think about the directions that have changed. So, you know, sanction-based accountability ended up distorting attempts to build cultures of continuous improvement. We measured but we measured things that didn't matter to the students or the teachers. We held students to, we held schools to standards. They were manipulated, neutralized and politicized. And then the pandemic has just been an eviscerator of of human capital. So, you know, I'm looking at this and I'm thinking, okay, we've got a set of solutions that really just look like more of the same. We've got a system that really hasn't even spent not even a third of the 60 billion that has been allocated to help fix the system as a

result of the pandemic. And and one of our major solutions is targeted tutoring that should have started in March 2020, not March 2023. So none of this inspires confidence that the way we're doing things is going to help.

In parallel to that, what does give me hope is the confluence of a number of parallel trends that are the basis for renewal and reform. Clearly, these involve students own expressed desires for greater engagement in relevant learning. Kids are learning all the time, and they're learning more than they ever were before. They're just not learning it in school. We see advances in personalization and scale that's afforded by technology. That's a huge advantage. And again, as Kathy has reminded us, the scientific progress in understanding, understanding learning. All of these are expressed in lots of different spaces in the field right now. They're kind of the green shoots of a fresh approach, you know, or a more hopeful path. But, you know, my sense is that we need a much greater and much more organized and proactive approach to redesign. I think the book is a real great example of that, and I would look at that redesign as really centered around three core understandings that are kind of the architecture of a refreshed system.

First, the understanding is learning is personalized, and it's a rigorous process that of acquiring knowledge and skill relevant to students interests and goals. Kids like to learn stuff that's hard and meaningful to them. Second, teachers relationships with students and peers relationships are the core resource of how formal education systems contribute to learning. We start there. We start with relevance for kids. We start with relationships with key people. And third, I think advanced technology can support learning that's both personalized and effective at scale. So those those three elements, I think are in play now. They show up in many, many successful small-scale innovations. They show up in in the book in many ways. It's the corresponding changes in schools, in classrooms are possible now, those are not incremental shift of the status quo. And I think those, moving in those directions will require us to rethink and loosen policies on accountability. We've got to redefine our measurements of student knowledge and skill. We've got to build robust and incentive and career development paths and systems for education, educators that that hold educators to rigorous standards and then reframe these aims and solutions from the kind of more of the same to a design, to really a design lab type of approach. Thanks.

Angela Duckworth [00:27:58] I also love Marty West, but I have to say we have to be able to say something more than more is more it's, it's not just quantity. It's absolutely quality. And thank you

for that list of three elements of of of how we should do things not just more, but differently. So I'm going to turn to you now, Eduardo, and I'm going to ask for your perspective. You come to us from Colombia in the global south, where your country is in the process of educational reform. My question for you is and it's a compound question, so a series of questions separated by semicolons, what are the challenges that you see and the potential of solutions at scale? Tell us about what your government is doing and finally, what you're doing to raise educational achievement.

Eduardo Escallon Largacha [00:28:55] Thank you very much. Yes, I will go through the three elements. First, more than educational reform, we are starting a new government, and that implies changes in policies, adjustments and new emphasis. An important challenge now is the emphasis that the new government is placing on higher education. So we are again setting the agenda and emphasizing the importance of early childhood education. If we want to raise a new generation for peace and sustainability, you know, little children do not march and not vote. College students do so. So that's what the government is answered to. Second, our school system was closed for almost two years due to the pandemic. Colombia is one of the countries in the world with the longest closure of schools. The global concerns with learning losses are even greater in Colombia. It is estimated that 80% of children in Latin America and the Caribbean cannot understand a simple written text by the end of primary school, compared with the 50% before the pandemic. We don't have official rates, but it is estimated that the school dropout increased in, in the last two years. In addition, we have thousands of migrant children from Venezuela and Colombia. In this context, one of the main challenges is to ensure that all children have access to quality early childhood education.

Another challenge is the concern with the learning loss. This concern has led the opinion and education system to lean towards an emphasis, an emphasis in academic contexts, contents and outcomes, rather than the ability to critically think through a problem and to apply new knowledge. Time for playful learning and even resources has been limited. So the most important program to improve quality education that Columbia has now is called literally everyone to learn. That's my direct translation. This is a large-scale program to training service teachers with an emphasis in, in the places with the greatest need to improve quality of education. It works as a cascade model to provide training, curriculum, materials and coaching. One of the main challenges is how to secure the quality of a cascade model and to define what teachers have to learn. What are we doing in the School of Education? The project that I have the most affection for is the systemic intervention in the

Department of Caqueta, the state of Caqueta, which until recently was the bloodiest theater of our armored conflict. We, we are bringing education to where there used to be war, but not just any education. Thanks to the support of the Lego Foundation, we are training and upgrading teachers, directors and political officials in playful learning early childhood education and the science of learning and child development. The name of this program says it all. It is called I Laugh, I Play, I Learn. As you can see, its core objective is effective learning through play to promote child development. We are working with all levels of the system, starting early in life, reaching rural areas and testing strategies for scaling. This is what we wear on the field. And it says here, playing to educate. That's so, thank you. This is a contest that, this is my answer.

Angela Duckworth [00:33:39] That's great, Eduardo. Thank you. I love, I play, I learn. And also thank you for correcting me. Eduardo. I, you know, sort of misspoke when I said what's going on K-12 education, because absolutely children must be learning in those early years. It's too bad they can't march and protest and hold signs, I guess that's the job for the rest of us. So I'm going to loop back around again. And as I said, I promised the audience I am going to save some time for questions. So maybe briefly, I'll ask Kathy. I know you're interested and you know you are like the messenger for bringing one of, I should say, but you know, the messenger for bringing the science of learning, which Eduardo just mentioned. You know, can you say a little bit more about that you did, in your introductory comments, you know, how do how do human brains learn, etc.? What is something that we do wrong that we should do differently? And and the more specific, I think, the better here.

Kathy Hirsh-Pasek [00:34:38] Sure. Well, first of all, there's a whole lot of us, Angela, I would count you and Eduardo and Bob in the scientists trying to bring this to the fore. And over the years, I'd just say Roberta Golinkoff and I took a slightly different twist, which is in science, what we always do is we say, where's the gap? Where's the gap? What do we need to do as the next small experiment to fill the gap? But we do a lot of that. But there's another way to look at the science of the last 40 years that I think will be helpful in professional development, in the way we rethink what we can do in classrooms. And that's to ask, what do we know? What do we know? What do we know? Up to this point in time, over the last 40 years, what can we say we actually believe in? And I think there's a three part equation that's kind of the answer.

So going with three's again, Bob, because I agree with your threes as well, but I think the first part deals with what Pasi talked about with equity. And part of that is because up to this point we

haven't been good listeners. We need to hear the teachers voices. We need to hear parent voices. We under, we need to understand the culture and community that our kids come from. Otherwise we can't make learning meaningful. It's just impossible, and I don't think we can make it equitable. So if the first part is cultural community values, part two of the equation is a better understanding of how children learn. I'm going to fault scientists myself too, for just a moment, because a lot of times we speak in jargon and we don't speak in ways that are accessible or edible. Roberta Golinkoff and I call this edible science that's accessible, digestible and usable. So we tried to do that and look across the literature to find out how children learn and ask if there was any consensus on what kids need to know as they move into the knowledge age, for how children learn. Just a simple checklist. It could be a tweet. Children learn when they're active. You've heard that word bandied around before. Not when they're passively sitting there. They learn when they're engaged, not when they're distracted. They learn when something's meaningful and can connect to knowledge they already have, not when it's disembodied. They learn.

Bob said this, when it's socially built on relationships between teachers and students, peers and students, they learn, when they can hypothesis test and be curious, when it's iterative and when it's joyful. When I asked and I did ask, I'll ask the audience, What's the first word that comes to mind when you think of school? Believe me, the first word is not joy. We didn't see it in any of the 1000 responses, we saw boring and tedious. That's terrible. All right. Let's make the science of how kids learn. Then move over and say, what do you need to know? The business community actually gives us a fairly good list in surveys over the years. They say we want good collaborators. Everybody's working in teams these days. That's the social relationship part. Built on that is communication because you have to be good communicators. If you don't have strong language skills, you're never going to learn to read. It's that simple. And by the way, the latest stuff says you also won't learn math. I know a little bit shocking, but it seems to be quite related. So collaboration begets communication. Those two beget the ability to learn content, the third C. And content is learning to learn, not just learning stuff. Then content isn't good enough if you don't have critical thinking and no creative innovation to think in different ways.

And finally, the confidence which Angela, drew strongly from your work to say, you've got to persevere. You have to have the confidence to say, even if I fail, I still work at it. And I can make something better of it. Those are the six C's along with growth mindset. When you look at the cultural

values, when you look at the checklist for how, and you look at what we know about what we need to learn, I think there's a fair amount of consensus in our field and that can go across digital and non-digital. But our classrooms right now don't look like they're using these principles at all. Some do. Some do. There are some bright spots. But imagine if we used that checklist when we thought about our lesson plans. I think we could cross cultures, we could cross ethnicities, and we could come up with a richer educational system for all.

Angela Duckworth [00:39:11] Carol, as— as Kathy paints this picture, I think some would say great, but then they might also say, wait, how like, how do I make this actually happen outside of the lab and inside the classroom? So can you say a little bit more about moving from theory to practice? And again, the more specific, the better, you know, barriers you've, you know, needed to overcome, etc.. I'll turn it over to you.

Kathy Hirsh-Pasek [00:39:41] Well, Carol, just I was just going to say part of it is just to discuss that mindset change that we did when we were at your school, which was so powerful.

Carol Lautenbach [00:39:51] Yeah, absolutely. So, you know, we started with a human centered design thinking process. So educators were involved from the very beginning in these transformations that were happening. This wasn't something that was done to people. It was something that people came, came along the way and learned about these mindset shifts. And what was so interesting was watching how the perception of challenges changed over time and how some real bright spots emerged. So just take the use of time, for instance, before we began this transformation process, sufficient time for educators to plan individually was a was a challenge. It was it was talked about. It was, you know, addressed. But that individual planning time was was critical.

But during the transformation, time itself began to be looked at differently. So a desire educators had for more time to collaborate together emerged and professional learning communities led to major changes in the schedule, including things like early release days where teams had a chance to work together and even common planning time adjustments during the school day. And similarly, prior to the transformations that happened in Godfrey-Lee, thanks to Kathy and her team's help. Structuring student intervention time was a challenge due to staffing, to numbers of students who are impacted and instructional schedules. But when teachers saw that providing thematic core instruction to all students in the ways that Kathy mentioned culturally responsive strengths and interest based, they began to ask for more instructional coaching within their classrooms to build their

skills in ways to teach all students at a high level, as Bob was talking about that rigorous instruction that's meaningful and and joyful for students. So it really was in the application of the science of learning that the solutions were discovered. Teachers not only got what was envisioned, but they took the lead on changing systems to enact the vision.

Angela Duckworth [00:42:08] I, you know, if I, if I, you know, took your comments out of context, somebody might be thinking like, you're talking about Silicon Valley. You're talking about like tech start ups, human centered design, like joy, play, innovation. Those are words we should be using about education. Okay. So what I'm going to do is switch to some audience questions, Bob. I'm going to direct the first one to you. This comes from Chin Yu, from the Ministry of Education in Singapore. This is, of course, a global audience, it being Brookings. And the question is, what implications does this model have for teacher professional development?

Robert Pianta [00:42:48] Oh, great question. Right. It is right up my alley. So I think there's, there's three ways that I think at least three that I would think of in response to that. First, if you, if you give, this effect, if you give teachers a survey about what they know or who their theorist is, you know, that drives their understanding of of student learning, they'll name two people, Piaget and Skinner. So that in some ways, that's the first solution. So teachers have to have deep knowledge and extensive knowledge of child and adolescent development. Just just what how do kids develop? Then they need to know and have deep knowledge and begin to build a set of skills around what are the conditions that engage kids, contextual conditions that are constraints and enablers of those developmental processes that you've just learned about. And then they need the knowledge and skill and lots of practice as an enacted enabler of that. And one of the things we've used a lot with, we started using this at UVA, and Julie Cohen and a couple of other colleagues there have done great work on this, which is really to give teachers many, many, many opportunities for practicing those skills and those and that knowledge of engagement through simulation. And it derisks the opportunities for for these students engagement, gives them much, much more opportunity for feedback and practice before they drop into the deep end.

You know, it's obvious, but those are three real anchors, in my view, of what teacher professional development should look like, pre-service and in-service. And then, you know, the other piece of this is just to really rethink credentialing and, and and drive things much more toward a much more competency based model for credentialing.

Angela Duckworth [00:45:00] The second question from the audience is, I think for you, Eduardo, if you don't mind, this is from the Opportunity Institute. And the question is beyond talk, what process might better influence how practice informs policy and research and bring those on the ground, which I think you are, if you agree with me to, you know, upper level decision making. And I think this gap between, you know, people who actually work with kids and have any idea what's going on, and then the people who have the power in the decision making in the budget is it's a great question. So you can answer it however you like. And also you're muted which you probably know. But just I'm saying it.

Eduardo Escallon Largacha [00:45:47] Yes. Well. I think that what we are doing actually is a systemic approach. We are just teaching the in-service teachers, but we are working with policymakers also in order to, they to learn the advances of learning science and pedagogical science of what Bob was saying. And we are trying to put the effective learning to play in the forefront. But the things that we need of all the people who are in the different contexts of the our early childhood students and K-12 students also, that you know, parents, peers, family, teachers, school, community policymakers, as you know, the whole ecosystem, you have to work with all of them and they have to really understand what the students and the little children need in order to have that development. And of course, its not content, its developing all these faculties. So I think that policymakers and caregivers and teachers need to know about what the science of learning is telling us and the science of development is saying to us, and I would say it is not just Piaget and Skinner they need to learn about Pikowsky (phonetic) also, because they need to put it in the center, the interactions, and that quality of interactions, I think is the most important for parents and policymakers to understand that we, we need to really promote meaningful learning resulting from the quality of interactions.

So, for example, to achieve this, we are working, we are, we really are working that we need them to understand and appropriate the theoretical concepts and advances of this contemporary science. But this has to be in dialogue with the practices, in your practice as a caregiver, your practice as a parent, your practice as a teacher, your practice as a policymaker or as a director of a school, and especially in the school of education, we are training this here, there in the region, and really understanding our our own educational practice. In this sense, I mean, there is a new curriculum, which is our own active, participatory, collaboratory and critical pedagogy. We are teaching them of these and about, you know, brain architecture is something that is really new for everybody here and

they need to learn about it. So the thing I synthesize is we go and work with all of them. We have special training seminars to policymakers and we have special training sessions with teachers in-service. And I resume this is, how we teach, is what we teach. So they really leave these these new interactions, we have playful learning and we are learning about, for example, the architecture of the brain. And that's that's what you need. They need to really know, understand what is happening in, in those brains of how interactions, especially those that promote, promote verbal thinking and language, are the most important, that are the basis for all the other learners. But I hope I can use that much.

Angela Duckworth [00:49:24] No, that was excellent. I also want to give credit to Brookings of this because I think this conversation, right, just the mix, right, of these different perspectives like that's also an answer as well. I think it amplifies what you just said, Eduardo. Okay. I am going to read you all this panelist a third question from the audience. I also want to tell the panel that I would love to end this conversation with just your last words. You know, I'm going to give you the heads up of a minute or two to say that at the very end, I would love you to leave us with if there's one thing that we take with us from what you're seeing, what would that be?

But here's my last audience question before we go to that, and then I'll ask whoever wants to take it could be more than one of you. This is from a listener or audience member, Ira. The culture of education is closely intertwined with a top-down command and control leadership model. This model has proved ineffective in business, and it smothers iterative bottom-up problem solving in education. How do we change the leadership style and school culture? It's a bit of a you know, it's a question that any of you honestly could answer. And I wonder if you want to raise your hand and say you'll take it for the team. Kathy.

Kathy Hirsh-Pasek [00:50:51] Yeah, well, it does seem to me like Bob is really the one to hit it off. Yes. So, Bob, can I volunteer you to start us?

Angela Duckworth [00:51:00] Yeah, Bob, you should volunteer.

Robert Pianta [00:51:02] Well, I'll try. Yeah. So. There's I think there's— there's a couple of dynamics to this. First, I agree completely with the point, and it's it's the right one. And to do that, we have got to be able to empower, empower and loosen restrictions on the professionals, Kathy mentioned this earlier, that are working in schools, and at the same time as Eduardo and others have mentioned, they have to be, their knowledge base of contemporary child and adolescent development

has to increase very, very rapidly, very quickly. So so I think you have to have a very honest dialog around we can we can loosen restrictions, you know, so that you have much more responsibility and ownership over things.

But at the same time, you have responsibility for developing yourself and developing your knowledge and being held to a set of high standards. So the whole dynamic around accountability, which I look at as responsibility, has to be surfaced and it's got to be surfaced very honestly and very candidly. I think otherwise, I don't know how you get there because you're always going to be operating in some sort of tension around compliance and control and command.

Angela Duckworth [00:52:28] And Kathy, you did voluntell Bob to answer that, but I think you start us off by saying that, you know, teachers are professionals. It seems like we don't treat them that way, but they are. So so let's get to the very end of this conversation in the way that I just mentioned. I'm going to ask Kathy, Carol, Bob and Eduardo in that order. Why don't we end with your, actually, you know what I got, if you don't mind, I'm going to end with you. So, Carol, you're up first. So, Carol, what would you want us to take away in a minute or less from, you know, what you've learned?

Carol Lautenbach [00:53:08] Great. Well, thanks for this opportunity again. I think the big question always is, it a scalable can anyone do this? And (inaudible), a really a very small district in Michigan with high free or reduced lunch rate, great things happen because we used a design process and we agreed that we could fail forward. You know, given the high stakes that teachers work under and Michigan's teacher evaluation system, we really listened to teachers when they asked for clarity on what this taking a risk meant. And we worked together with our administrative team to provide clear guidance on that, to create many paths to participate in professional development, as Bob and Eduardo both talked about, and to provide mentoring and induction programs for those new to our system.

And what we saw in walkthroughs and observations as educators were working through this process was them becoming more curriculum designers instead of content deliverers. We heard students being asked to evaluate themselves on their growth and things like collaboration and creative innovation. And we heard actionable feedback being given. We experienced student exhibitions of learning in which their strengths, interests and the new knowledge that students had created were being presented to authentic audiences. And when we surveyed for feedback after a district wide themed day based on the six C's, students and educators expressed that the experience

was joyful and that broad transferable skills grew. It can be done. So we saw much less transactional learning and more transformational experiences. And the last and most importantly, we saw minds, mindsets shift. Learning was less about a product being delivered in classrooms and more of a process to be lived through relationships and experiences.

Angela Duckworth [00:55:03] Thank you, Eduardo, dividing the math, in 30 seconds, could you give us a last thought to take home with us?

Eduardo Escallon Largacha [00:55:13] Well, I summarize and I want to go with what Kathy, Kathy says at the beginning. We here, my colleague, Carolina and I, we really think that teachers need to know and understand the evidence of the learning and development of those sciences to place an emphasis in quality interactions, the reduction of stress, and the importance of teaching for development of a breadth of skills that our new generation of children needs. We need better educated and better paid teachers, satisfied, they have to be satisfied with their work and growing themselves as human beings in their daily practice. I, I really think we need a more dignified, socially valued teaching profession. Teachers are the real lever for change. The whole system and the whole ecosystem. They they are what they have always called the independent variable, I don't know how to pronounce that—

Angela Duckworth [00:56:26] Independent variable.

Carol Lautenbach [00:56:28] Got it. Yeah.

Eduardo Escallon Largacha [00:56:29] So, I mean, if you change that independent one, you change the whole system. You know, 100 years ago, a Colombian pedagog predicted this to our daily researches. He says the school will be what the teacher is. So I always said this whole system will be what the teacher is because the system helps us around the teacher and to promote and to really promote that in a creative, innovative and professional teacher, as the last question also said, in order to grow from here.

Angela Duckworth [00:57:06] Thank you, Eduardo. Okay, Bob and Kathy, this is your duet. Unmute yourselves and just say whatever you want us to take home with us.

Eduardo Escallon Largacha [00:57:13] Thank you.

Angela Duckworth [00:57:14] Thank you, Eduardo.

Robert Pianta [00:57:16] We know almost all this already, and we have thousands of examples of what we've been talking about here out in the field. The fundamental challenge, I think,

for us is to very inclusively thread those together in a, and articulate, a clear framework that the public can understand for the future, that that then everyone can connect themselves to and do the work that I think we all are talking about needing to be done.

Carol Lautenbach [00:57:51] And my part of the duet, would just say, I know everybody speaks of doom and gloom and we've heard this for decades. And in fact, the education system has not really led up to the skills that kids need for today. But I'm going to turn it on its head. I think this is the age of opportunity. I think we have enough of this science and the teachers are on board to turn this around with a positive solution, that it's scalable across ages, across ethnicity, across socioeconomic status. And I think we're going to find that it really is possible to have joyful teaching again and have deeper learning that's both sticky and transferable. And I want to thank all of you for joining us today.

Angela Duckworth [00:58:39] Thank you, Kathy. Thank you to the panel. Thank you, Brookings. And thank you for being with us. It is time, we can do it, Carol says we can do it and she's right to make schools work. Fantastic. Thank you for being here.

Robert Pianta [00:58:52] Thank you so much.