Speaker 1 (00:04:59):
To talk to some very smart folk and very active folks about education for self-determination and the future economy. This topic in the 21st century, couldn't be more important taking up a very serious question about what role education needs to play in supporting our people. So they are thriving and not just surviving in the 21st century. It's about jobs and careers, but it's also about being fully prepared to participate in every aspect of the world that we are all living in today. I have with me today, Maha, Moses and Rustin Ali. I'm gonna ask them to tell you a bit about themselves and why this topic makes sense, and then we'll jump into some conversation with them and then eventually some Q and a with you. Thank you for joining us this afternoon. Start off.

Speaker 2 (00:06:16):
Hi, good afternoon. Uh, so my name is Maha Moses, and I'm currently the executive director, a near peer math literacy organization that frames its work as being at the nexus of math literacy and social justice or math literacy and social change. I got into this work, uh, because of my family story, um, because of my father in particular, but also because of my mother. Um, so both of my parents were involved in the civil rights movement in the sixties actually really, um, turned his life over, uh, to, to freedom work. And when I was in the eighth grade in, uh, Cambridge, Massachusetts, he thought I was ready to take algebra and the school didn't offer it. And so his, um, freedom movement bug I think was, was, was triggered or reactivated. This was in the early eighties. Um, so it was about 20 years after his work in Mississippi.

Speaker 2 (00:07:38):
And he started organizing with other parents. Um, he ended up having to come into my classroom to be my algebra teacher because the school wasn't prepared to, to teach me algebra, the teacher wasn't prepared. And so what he discovered was that, um, access to quality math, to the highest level of math that the school was offering was basically broken down, along race class lines. And he was ENT in a say in a sense again, that was the early eighties. And he saw, um, that math was becoming a new literacy, right in the same way that reading and writing was a literacy. Right.

Speaker 2 (00:08:30):
And so he started to organize with parents around this question, just in this school in Cambridge, around who's getting access to algebra that work turned into the algebra project. And later after I graduated from college, um, when I was in my, actually during college, when I was in my late teens, um, I gravitated to the algebra project and started working with the algebra project. And when I graduated from college, um, I continued working with the algebra project and after some years, um, started working with the young people's project, which grew out of the algebra project. Um, so to BJ's question about why I think this work is important. Um, it's the only work I've done, um, my whole professional life. So I guess I think it's important and I can talk more about that later.

Speaker 1 (00:09:28):
Uh, algebra is a family business for the Moses family. So we're glad to have you today. I'd like to now have rustling Ali, introduce yourself and let's settle back after you do what you do, uh, into this conversation. So rustling
Speaker 3 (00:09:47):
Jay, and it's a real honor to be here, uh, with you both today, Micha your father and your family business as DJ put, it taught me so much, so much the notion that rigor that algebra, this gatekeeper listen, algebra is still the highest failure rate course in the country has been when I came up and I'm over 50 has, and is still today. It is the obstacle and the gatekeeper ultimately beyond for getting to college for getting into career pathways that have gainful employment and rigor your father in your work of framing it as a truly a civil right changed my life. I, I, I was a white collar criminal difference and securities fraud litigator, knowing that feeling like I needed to purge that film off my body every day, knowing that I was gonna be the one to take the firm up on it, you can do 30% of your hours, a third of your hours, pro bono, even in a top tier law firm.

Speaker 3 (00:11:03):
And very quickly realized that this idea of education and public education in America all the way to and through college or any lifelong learning path really was the most important civil rights issue of my generation. So I've had experience in both the think tank world, uh, founding the education trust west. I had the great privilege of being the assistant secretary for civil rights for president Obama, uh, for the first term in the department of education. And now, uh, I, I help run the Emerson collective where I, uh, sit as managing director of the education fund at the Emerson collective, a social change organization funded by Loraine Powell jobs. And in addition, she and I co-founded the XQ Institute, um, in 2015 to help transform the nation's high schools, high schools have, have, uh, been stagnant. They've essentially remained the same for the last hundred years.

Speaker 3 (00:12:10):
They certainly haven't kept the pace of other industry. And we believe in data backs it up that high schools really all are the fulcrum for change across the entire K12 system. So, uh, uh, again, let me just say, I'm so honored to be here with you, uh, Maha. I am so sorry for your loss and, and, um, and, and the country lost a national treasure this summer when your father passed and we are, uh, so grateful that you, uh, and your brother have taken the reins. Um, especially as we mark the 60th anniversary of SNCC, an organization that we know, um, was critical to the success of the civil rights movement of the sixties. And I believe your work, uh, standing on his shoulders is going to be critical of the civil rights movement that we live in today.

Speaker 1 (00:13:14):
Russlyn thank you so much rustling, excuse myself. Uh, my name is BJ Walker. I've had a long career too long to give you a number for, uh, involved in human services. And on the side I met Bob Moses in the early nineties and became a, a strong advocate around algebra and mathematics literacy. Uh, I, but I've, I've spent my, my life working in education and human services, and I really am very, very committed to thinking about ways in which we help our public leaders, our public sector leaders, uh, do everything they can to, to have our public institutions and our rights, uh, protected inside of them. But also that they have a mission to make sure that all of us are being all that we can be. Uh, as we grow from children to adulthood, uh, to senior hood, which I happen to be in right now, but, uh, having done those introductions, let's start off Micha and Russ, I think we really ought to start in the whole topic for this conversation today.
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Speaker 1 (00:14:34):
What do we believe necessary to actually, I mean, that we have to keep talking about what is it going to, to, to be what was, what is it we're going to have to do to actually educate and ensure a strong economic presence for the black community in the 21st century? I can tell you this as a human services person, uh, we cannot continue to just rely on a public sector, safety net, cause it's not safe. So what we need to do is to make sure everybody can stand on their feet. So what's it, what's it going to take, what's gonna be necessary. Do you believe to really get a strong economic presence for the black community in the 21st century?

Speaker 2 (00:15:27):
Hi, Micha. You wanna start? There I go. Yeah, sure. I can. I can go. Um, so I guess my way of thinking about the problem is just, um, so deeply influenced by our work and the algebra project and the young people's project. And of course, um, my dad's thought leadership around all of this work and thank you wrestling so much, um, for your words. Thank you. Um, but so I think that one of the things, um, that we've been thinking about is in order to address the problem, you have to understand the problem and understand it in Ella Baker's sense of understanding, sort of getting down to the root cause and like how much do we actually have to do to, to get down to the root cause of the problem. And so what, um, we've talked about over the years is the idea that, um, citizenship and economic access for black people and really for all people, um, but particularly for black people and poor people are now linked to an issue of math and science literacy now in the 21st century.

Speaker 2 (00:16:51):
And so while an industrial society, um, schools educated an elite to run the society, and most people were prepared for factory work or other kinds of work that required, um, like repetitive tasks that, that mimic factories. Um, but the 21st century has ushered in, uh, this huge technological shift, um, in the global economy that we all experience and that we're deep enough into it, um, to really understand and appreciate it. Um, but this shift places, the need for math literacy front and center. And, um, so one way my dad talked about it that I really loved and appreciated was that he would say the industrial revolution built machines that automated physical labor. Um, but that the information age builds machines that augment and organize and automate mental labor. And so it's completely reorganizing the skills that are needed and what's valued in, in the labor market and this is happening everywhere.

Speaker 2 (00:18:06):
Um, and so actually I, I came across an article or an article was shared to me, shared with me this morning, um, about one way this happens in the criminal justice system. So we know many of us know about these automated programs that are used to assess the likelihood of recidivism and police departments use it and judges use it to guide their decision making. Right. And so, um, for instance, um, with this, um, program, um, of those who were labeled higher risk, but did not reoffend, um, 23% of white people who were labeled higher risk did not reoffend, but then 44% of black people who were labeled higher risk did not reoffend. So the system is skewed. Um, the coding is skewed, um, for white people to be labeled lower risk. Um, for instance, of those who were labeled lower risk, but did reoffend 47% of white people who were labeled lower risk did reoffend, but only 28% of black people who were labeled lower risk did re-offend.

Speaker 2 (00:19:22):
But so this is happening. These kinds of systems are being put in place and all over our society. And so it gives rise to the question of what do we, as citizens, um, as black people need to understand about the math and science behind these programs and how do we organize around the politics and the math and science related to this, to these issues. And then of course the question of economic access is critical. Um, so in this economy, that's increasingly organized around knowledge work, which is powered by technology, which is powered by math and logic and, and what people call computational thinking. There there's an opportunity to, to organize around equity and math education. Otherwise we really run the risk of further cementing, um, the current inequities in, in the education system, um, and the inequities in our society as a whole and how that gets manifested in the education system. So I think partly where we start is just really, um, framing and understanding the problem, which then points to a direction of, of what to do. Um, and I can I'll pause there.

Speaker 3 (00:20:51):
Well, thank you, uh, Maha. That was really, I mean, so much of what you said resonates and, and in particular, that link, uh, between the, the needs of today's economy and what happens in our schools, we are a knowledge based economy for the first time in a hundred years, yet our system was built on a principle that prepared young people for factories, right? The opportunity that we have now that is unprecedented is rescue monies from COVID. We have more money coming into our public schools than ever before, even when LBJ launched the war on poverty and created the elementary and secondary education act, which for the first time in history, devoted millions of dollars targeted to title one schools, schools that we defined as those serving mostly low income students with the recognition of the change of federal policy, knowing that that the impact and effects of poverty made both the job and the duties of schools stronger.

Speaker 3 (00:22:06):
And we were gonna provide resources to supplement schools that were educating students. We know that the pervasive achievement gap, that sort of lack of quite frankly, great teaching, teaching our kids, what we need to know and be able to do in order to succeed in this new economy is not happening at the scale that we need it to. But back to what, and we could go on and on about these data, I know Mayisha, you like bury yourself, like, like, do we around what these data say when it comes to not just the rate of achievement throughout our schools, but the opportunity gaps that give rise to those achievement gaps, cuz it's not this, it's not that I grew up more in PG county. It's none of those things <laugh> right. The contribute to the achievement gap in the end, those are correlations.

Speaker 3 (00:22:58):
They are not causative. What causes it is that our kids that are most dependent on schools for their learning actually get the least of everything. Research says that we know makes a difference. So it is not BJ that we don't have the knowhow on what it takes to transform schools and prepare everyone for the economy that Maha is so eloquently laid out it's that we don't have the civic will. And for far too long, there it's been a zero sum game. This is why the hope of COVID relief monies, right? We're looking at $190 billion taken together 170 billion just from the cares act alone, $190 billion put into K12. It has a three year cliff. They have to spend it in three years. One of the other significant significant policy changes in this stimulus act monies is what's called maintenance of equity. It's the first time ever the federal policy has said, no matter what, these dollars, the maintenance of equity provision, we can go on and on about the won
about this effectively, it means that everything we give to, to schools plagued by the achievement gap, plagued by the opportunity gap goes to solve them.

Speaker 3 (00:24:26):

And that we aren't gonna take money that had here too far been earmarked for low income schools and take them to cure the funding and other gaps caused by COVID. We're gonna make sure these monies go on top of those equity based dollars that have been historic in the Obama administration and dating back. But as I often, I know like you IANS so many watching today really are students of history. And when I thought about looking at these monies and realizing that they were unprecedented, that we had never had resources like this before in K12, that the only time really was when LGB LBJ launched the war on poverty. And at that time he said in the speech that created title one, basically he said that that, that, that, um, we needed a fifth freedom building on the four freedoms of, of Roosevelt's new deal, a fifth freedom.

Speaker 3 (00:25:23):

And it was gonna be the freedom from ignorance, the freedom, so that he said, quote, every young person everywhere can be free to develop their talents to their full potential unhampered by arbitrary barriers of race or birth or income. 60 years ago, that very much was about access. And today we are standing on the shoulders of giants that made that access plausible and real and made a country hungry for it and, and, and laid bare the injustice that was happening in our schools. We wouldn't have known if it weren't for SNCC. And now the movement ahead, especially when we have a kind of empathy for civil rights that we certainly have had why in a mainstream, in my lifetime now it's to get to quality, to make sure that everything our young people are learning accelerates the closure of the achievement gap, especially now the learning loss as a result of COVID is devastating.

Speaker 3 (00:26:28):

We have to catch kids before they slip. We have to ensure they get the strongest and best teachers. We have to make sure once. And for all, we take these stimulus monies and we close the funding gap. Still today, poor schools get over a thousand dollars, less per students by and large Countrywide on average, than, than students in our wealthiest students in, in our wealthiest district, that kind of funding gap per student at scale is devastating. So it's, it's time we take these resources and we do the hard work of following what the research says. And we, we spend them in a way that we know our kids need the most. And it's about high time. That again, building on the shoulders of so many who made this work possible, including, and perhaps especially your father, that we make this a movement. Once more change of the magnitude, we seek requires a cultural shift.

Speaker 3 (00:27:32):

Yet these issues we're not talking about, we're talking about vaccines in schools. That's what con that's what dominates civic and political conversation right now about schools. I'm not at all gonna trivialize that and say, that's not important, but at the end of the day, the reason our country is what it is as a first generation American, I will tell you is because we are the only place in the world that requires all the way through universal high school. We were the first place for sure, universal high school education as a right. We were the first place and still we are one of few. And so treating this Mica the last time I saw you was at the calling education as a civil right pre pandemic in October of 2019, really honoring the elders of this movement and supporting
leaders like you that are hostile and at it every day, because we do need to treat education as a civil right in this country. And we have not for far too long,

Speaker 1 (00:28:42):

This conversation is really laying a platform to talk about just that topic, uh, rustling, uh, most folks really don't have an understanding of the significant gap that exists between what our young people need in the 21st century and the gap between that and what happens in schools. And so they, they don't have a full understanding of what a marketplace. I mean, most people participate in education these days, most families, it's a marketplace, uh, uh, you know, those who can get their kids in the best schools, people buy for getting them in. It's an application process. Uh, there's just a lot going on out there and it's not about access and equity and, and, and a, a, a floor that everyone is expected to be able to stand on. And, and, and most people don't know that fundamentally we have no constitutional right to anion. Uh, most of us would believe, I bet you walk down the street with a microphone.

Speaker 1 (00:29:56):

And you said, do you believe that the constitution says that you should have a right to the education? Everybody's gonna raise their hand and go? Yeah, of course. Um, I, I think about the need, uh, that we have as a nation going forward of how do we generate the kind of enthusiasm, the energy around this topic? Uh, that's so fundamental, not just to people, but it's fundamental to all generations. How, what do we need to do? I mean, in the sixties, uh, the people, uh, with the problem in Mississippi became the drivers of the solution, but how do we get the people mobilized energized? What does that look like in the 21st century from your perspectives?

Speaker 3 (00:30:41):

Well, BJ, what I would've said that looked like pre COVID and what it looks like now is very different. I don't know a parent that hasn't witnessed firsthand, the lack of quality and the lack of rigor, and just how poorly our schools are educating our young people for the future. Now, certain things we've made great progress on for the very first time. I couldn't talking about the digital divide <laugh> right. It was like pushing, pushing a Boulder up a hill. Finally, we've made progress on that because you couldn't teach at all. Unless young people had devices in a bandwidth to be able to reach their teachers in any kind of hybrid setting. Now we are going to the place where at a minimum high schools are gonna need to be a kind of hybrid. And, and, and actually that's what the research says, that, that that's good, that this notion of synchronous and asynchronous learning so that young people can pace themselves, right.

Speaker 3 (00:31:45):

As opposed to sticking with this time based system, upon which the whole thing was built, the whole thing. Yes, many people don't BJ understand that we don't have a federal right to an education in the same way that many people don't understand that every state constitution actually does have a right to an education. Mm-hmm <affirmative>, it makes the legal, the legal remedies more complicated, but it doesn't make the right obsolete. But more than that, it's not just about, it's not just about access. It's about actually seriously, seriously rigorous teaching and learning so that we're prepared for, for, for life after high school. Again, I think, and, and, and anecdotally, we're seeing this everywhere that the innovation that has been lacking in the K12 system is starting to take foot that people are realizing not only must we, but because COVID upended everything, we absolutely have no choice at this time, because it's all in nothing.
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Speaker 3 (00:32:52):
You might have seen the LA Times article about LA, and it was LA county. I don't think it was just the district where full 20% of the young people in high schools just couldn't be found. They never logged on. They never logged on those that did logged on were half present and half not. So we are at a crisis point, the likes of which in schools, we quite frankly, haven't been, since we were barred from access, since the fifties and the sixties, when, if you looked like us, you couldn't go to some schools. We are at that crisis point again, it's not just, but it is especially suffered in our communities, but not just so this idea of taking what we know works, putting old bargains, old fights, aside, meeting young people where they are with now, for the first time, since the war on poverty, we have the resources to do it.

Speaker 3 (00:33:56):
We have the science to do it. Finally, technology has caught up with policy. So for all those reasons, I'm more hopeful. And there is a roadmap that if we have the civic will to follow. And, and my belief is that because we now know COVID showed everyone, even if we didn't know the data, even if you weren't wonky like us following this research, we see it. And we feel it that if we can do this as the next great civil rights movement in our country, we will all be better off. And so many of the isms that we are suffering through from tolerance to just the rise of ignorance that breeds the divide that exists in our country, I believe will start to win.

Speaker 1 (00:34:45):
It's a great point about meeting young people where they are. And I know that's at the heart of the work you're doing. Talk to us a bit about what that looks like and feels like in a post COVID world, or about to be post COVID world, also in a mid 20th, first century world, because in a minute, we're gonna be there. Uh, and, and how the work you're doing speaks to that.

Speaker 2 (00:35:13):
Okay. Um, yeah. So this is really the, the heart of the work of the young people's project. And so when you think about, um, who is most directly affected by this problem? Well, it's this, it's the students, um, and they have a window when they're still students, and then they age out of that status. And the question is, well, what can they do? Um, so one of their main problems is that they don't have the math teachers that they need. Um, they don't have elementary school teachers by and large. The country doesn't have elementary and middle school teachers that it needs to ensure that all children learn mathematics. And so one thing that the, the main thing that the young people's project has done is organized to get resources, to create spaces where young people can learn and teach bits and pieces of mathematics to each other.

Speaker 2 (00:36:16):
Um, we call them math literacy workers, and we consider it to be really important entry level knowledge work. When you think about the, the opportunities for work that young people have, what are the kinds of work that they can do as teenagers, that's giving them a taste of work that the, the emerging knowledge work, right? That the work that, that, that is proliferating a across the, the economy. Um, and so in that context, um, what we've been able to do over the years is to create, I guess, small beach heads in local communities working with after school organizations, working with schools, working with school districts, um, training and developing students from the community who may or may not be comfortable in math or gifted and talented in math. But
our point is that this is a serious problem that not only is your, your community and your
generation dealing with, but it's really a national problem.

Speaker 2 (00:37:30):
This is a very important problem for the country and the country actually needs you, if it's gonna
be able to work its way out of this problem. And so, um, engaging in hiring young people
through that consciousness. So they have a consciousness that as they're working, it's not just
about, um, doing math in a fun or creative way, um, or meaningful way. Um, but it really is about
math for citizenship. And, um, the other part of it is that, you know, if you think about it in an
industrial, we, the math that we, that we learn and teach is still an artifact of the 20th century.
Like we really still are figuring out, um, what needs to be taught and how it needs to be taught,
um, for math to be meaningful as a literacy, um, in the 21st century. And so the young people are
also pushing the boundaries on that question, because of course they have more degrees of
freedom working in the out of school time space teachers are very much constrained, um, by
various, um, state standards and, and district standards and testing, um, in terms of, um, what
kinds of innovation they might try to develop in the classroom, um, and begin to systemize for
students in terms of what works, um, teachers.

Speaker 2 (00:39:07):
And I've had teachers tell me this, you know, they spend way too much time doing things that
they know do not work, but they don't. Um, they haven't ranted themselves the freedom to buck
the system, to do what they, to try, what they think might work, um, might actually work. And so
students, um, who earn the right, who give themselves the right and earn the right over time by
demonstrating that they can actually figure out what works. Um, they are very important to our
strategy in, in our approach to the problem

Speaker 1 (00:39:47):
Russlyn that raises for me. I know you guys are out, uh, and, and looking at models of high
schools, trying to understand how we rethink this high school model and this whole issue of
young people as assets. One of the things I've found about doing community work is that our
young people are not ever seen as assets in their own communities. Uh, so are there some things
you guys are seeing or doing or hearing about that gives us energy around what Maha is talking
about in terms of engaging the young people, right at the heart of, of this issue around literacy
and, and, and their education.

Speaker 3 (00:40:30):
Yeah. BJ, you nailed it. That's it right. The best schools, the best high schools in particular are
those that have flipped conventional school design on its head and started mission and culture
with young people, what their needs are, what their voices are, what they want, how they want to
consume curriculum, what they feel like they need to know now. And that's not to say that we
don't need adults and experts in total partnership. Of course. Right. Um, having said that, so for
example, down to one of the things that we realized as we, I mean, no surprise, given everything
we've learned from Aisha's Maya's legacy and, and algebra as a civil right, is the notion that, um,
if we don't crack this, not of teaching algebra, if, if we, if we're trying to say that we know a
mastery based competency based system is how to do it.

Speaker 3 (00:41:31):
In other words, what are the stackable set of credentials that equal algebra? What are the stackable set of badges, if you will, that equal algebra? Why is it that if I struggle with polynomials, I'm likely gonna have to repeat the whole course. If somehow linear equations get stuck for me, I'm gonna have to repeat the whole course, cuz that's how we teach it today. So at XQ, we actually worked with young people and innovative teachers and developed are developing out a project based algebra curriculum, building on everything we know about the science, not just of what kids need to know and be able to do for deductive reasoning, which is in effect what algebra's all about. Right? But also on the how to teach so much, have we learned from the algebra project and great pedagogy everywhere and through them, it's actually how you tune an instrument.

Speaker 3 (00:42:26):

It's how you make and tune an instrument. It was also what our folks needed to do to be creative in a world where this is teaching and learning because we can't see young people, but we can find ingredients in our homes that actually we can make and in. So doing and just figuring out how to play and how to tune turns out with the best psychometrics and the be and, and to ensure psychometric validity with the best teachers, with the most rigorous scientists behind us scientists that are teachers, because turns out it is rocket science to teach rigorous courses, especially for the most disaffected learners we, we have made and will open source, open source, all of it, uh, a curriculum that young people not only have driven, but have defined equaling in nine units. The, the, the most rigorous algebra curriculum and, and fun in entertaining algebra curriculum that so many of our experts have ever seen.

Speaker 3 (00:43:30):

We have also seen in places like Crosstown, a school that many of you that know Memphis, would've known the old seals, Sears robot distribution center is dilapidated building for a long time. Now, if you go there, it's not only the center of cross, cross down high, but it has a medical clinic that last I looked serve 70,000. I'm sure that's grown since then. It has, it has everything from a theater to local businesses to housing. It's magnificent. It is the center of community its school was derived before the development was even really, I don't wanna say they broke ground. They might have broke ground, but it certainly didn't look like it does now full with a museum at all. It was designed. They call it diversity by design to heal the wounds. That was the segregation happening in Memphis, across Shelby county across it's. One of the most remarkable schools I've ever seen in my life.

Speaker 3 (00:44:31):

Its team was not only the most its design team was not only among the most diverse that I've ever seen, but it was completely and utterly student driven. And it still is recently, uh, uh, uh, I had not recently cuz time feels elastic in the pandemic. It was probably more like a couple years ago, but uh, the leader there, um, in the most graceful way and in the most rigorous teaching and learning moment I'd seen and what other leaders would've called chaos when his students walked out and revolted during the protests and around issues of equity and the way that these teachers took that as a learning moment and a healing moment, not only for the school, but the entire community, they do this idea of project based, learning, bringing arts and science and again, meeting kids where they are in really innovative ways. There is no one size fits all. That's what we've learned. That's what we've learned. But if you questions, I'm sorry. Yeah.
Speaker 1 (00:45:29):
The questions coming in and, and this one, I think picks up rustling from where you were, uh, a little bit ago, uh, one of the questions is what should states and districts really spend their COVID release funds on and what are some of the smartest investments they should be making in those three years? And so I'd love to get both a take from you and Myesha about some ways in which I mean school districts, you know, they, they have plenty of things to spend their money on. So the question is how could we give them some guidance about how these funds could, should really support a different experience for, for children and, and young people in the schools? So what's the smartest investments. Give me one or two things, a piece that would be a smart investment of the COVID dollars.

Speaker 2 (00:46:27):
Um, so I'll answer that question, but I wanna preface it with a little story about, um, my hometown, uh, Cambridge, Massachusetts, um, Cambridge is the innovation, one of the innovation capitals of the country, if not the world. Um, when I went to the high school so many years ago, I was the only black student in all of my math and science honors classes for all four years for my grade level, more or less, the same thing is happening. Um, Cambridge spends an inordinate amount of money, more than any other school district in the state, on its students at the same time. Um, Cambridge, as a matter of policy sets different targets for different demographic groups, for what percentage of students will meet or exceed expectations. And this policy is based on state practices or, or state policies. And the assumption is that performance will improve over time, um, based on starting with where students are now.

Speaker 2 (00:47:47):
So for example, for third grade literacy, the expectation is that 47% of African American students will meet or exceed expectations. While 70, 77% of white students will meet or exceed expectations for eighth grade math, it's that 25% of black students will meet or exceed expectations while 75% of white students will meet or exceed expectations. And the numbers are based on the achievement percentages from several years prior, um, to the target date, again, expecting that each cohort's achievement will reflect the achievement of prior cohorts. But so Cambridge hasn't said, what would our budgets and staffing look like if we expected black and white students to achieve at the same percentage now, right. Starting next year. So I think underlying this question of what do we do with all this money? There's also a question of like, what are our underlying assumptions about what we expect of kids?
Speaker 2 (00:49:06):

And this is actually the question that got the algebra project off the ground way back in the 1980s, because a letter was written to all of the parents and all of the parents were asked, well, do you want your child to take algebra? And everybody said, yes. And the second question was, do you want all the kids to take algebra? And everybody said, and some people said yes, and some people said no, and believe it or not, Cambridge is actually still fighting that fight around those same two questions today, all these years later. And so part of what we're running up against and running into is the way that the cast system operates in the education system. And so some of our dollars need to be spent towards addressing that question, like really wrestling with this idea of how cast lives and breathe in our education system and how we're in the process of making policy, making, spending decisions. How are we tackling that head on? Because I think, you know, some of the things that rust, all the things that rustling talked about in terms of what the schools are doing and the algebra curriculum, um, it's beautiful, right? There's a lot. And as she said, there's a lot that we know how to do, um, in terms of engaging students, but we don't agree that all students should be engaged at the highest level.

Speaker 3 (00:50:41):

That's right. That's right. I mean, this is it's, it's really the stubborn, the stubborn heart of this movement. And that is what, you know, president Bush used to call the soft bigotry of low expectations. It's not so soft. It's not so soft. We don't call it a cast system. Right. But it is one, you can see it as early as second grade. Wanna know why, cuz that's actually, when algebra starts <laugh> any standards of algebra actually actually map back to second grade, but BJ to try and answer your questions and listen, that crux up what to do now. What if we had the civic and political will to actually close the achievement and opportunity gaps? What if we had it to act on what everything research says makes a difference, then we'd actually make serious progress.

Speaker 3 (00:51:32):

And again, for the first time in our lifetimes, at least we have an unprecedented amount of resources to see it gets done. Now, the way these monies get distributed, it makes what to do a, a little bounded that is we have three years, three years. So, so the while the, the reflex might be to hire staff, we have to think about it in three years. What happens when we follow up that proverbial cliff because the resources to keep them aren't there. So that by example is one of the constraints we have when we think about how to spend these monies. We also know the distribution is two really important things. First stakeholders have to be involved according to the feds in ways that having served at a sub cabinet position as assistant secretary, I had never seen where the, the, this, this administration has really articulated the level in depth of community participation and stakeholder engagement that is powerful.

Speaker 3 (00:52:31):

And second, 10% of these money stays at the state. 90% goes to the districts. So with those things in mind, what are the kinds of things we can do? We certainly can invest in infrastructure, right? It lasts the kind of technological infrastructure. We need to create new systems of continuous improvements. We both on the data side and the assessment side COVID has also upended assessments. We weren't great at assessments for a long time, but we have to be able to measure kids in, in whether they're learning. We have to be able to measure whether teachers are
teaching. We can take some of these new monies and really invest in world class assess systems that are not solely about a one summative assessment. We can make buildings and learning environments that are innovative and fun and exciting and rigorous and technology based. We can empower communities to make schools, the hub of community.

Speaker 3 (00:53:30):

We've seen it with, with, with increasing super storms, not just on the Gulf coast and, and, and throughout, for example, the Caribbean, but we're now seeing it in Rhode Island that was hit by a super storm. Not too long ago, we ought to be able to make schools that can withstand superstorms that are the hub of community that are safety nets for community that can feed themselves that can or grow their own food, rather that can, that can make their own water that can serve as the great equalizer which our public schools were designed to be. We could take those monies and really deliver more effective daily learning experiences. Again, the best schools that we have seen are schools that don't just sit, have kids sit at a desk and teach with an adult in front of the classroom on a worksheet. Those are in fact, the worst schools, but really thinking about learning experiences that are engaging and rigorous.

Speaker 3 (00:54:27):

And we have enough science and models on how to do that at scale. And lastly, really understanding the pathways, uh, high schools, for example, represent about 30% of, uh, of, of, of typical districts populations. 30% of these monies ought to go to high schools for that reason we ought to think, and we ought to think about schools as the pipeline all the way up to ready, not just for college, cause all kids aren't gonna go for college, but we certainly want kids to be empowered to make the choice, the data about access to, to, to rigorous courses that Myesha speaks about are pervasive and persistent. It's not just algebra. You can see it all the way up to calculus. You can see it from biology all the way up to chemistry and beyond it's as simple as this, if we don't teach kids and provide access to rigorous curriculum, they won't learn these skills that are necessary to, to live out their life streams. So starting there and not just offering courses without the preparation for teachers and students to be able to succeed in them. So I, I, I, sorry, I'm a little repetitive about this BJ, but again, we have the knowhow, the civic will is what's been lacking for far too long. And hopefully at this moment in time is the opportunity to drive trial action.

Speaker 1 (00:55:47):

And I would, um, let me also, but Micha, I really wanna focus part of this back to you cuz there's a lot of people, all of us know them who are saying, you know, all of us can read, but come on now, all of us cannot do mathematics beyond the basics. And certainly not, you know, all of that, uh, complicated algebra, trigonometry, calculus it's it's, it's, it's, it's, it's flowing through the lifeblood of our, our psyches that we just can't all do it. And, and what I'd like you to do if, if you would, and, and, and I know, and I'm asking for it briefly, cuz I know it can get long. The thing that convinced me when I first met your dad, was this when he went through the five step process. Yes. And I realized if somebody had just known to take me through the five step process, I might have been able to conquer more math landscape than I was able to conquer.

Speaker 1 (00:56:58):

And so I, I, I think some of this is, as you guys are talking, I'm saying there are things out there that we know that open up these floodgate. And so I'd like you to talk a little bit about the five
step process because it's a way of bringing math to young people that engages them and involves them rather than just put something out there for them to memorize. Uh, and, and, and, and transactional stuff to do. Just talk a bit about it, just to kind of be, to convince everybody who's listening there. All of us really could do math. Really? We could mm-hmm <affirmative>

Speaker 2 (00:57:39):
Mm-hmm <affirmative> yeah. So, um, the five step process was actually an answer to a sixth grade teacher's question, uh, Lynn Garre. She wanted to know, okay, how am I gonna teach all my children algebra once the school decided, now everybody gets algebra, not just the so-called, you know, math genius kids. Um, so she wanted to know, how is she gonna now teach all of her children algebra? And so my dad was studying the philosophy of math at Harvard. He was in the middle of a doctoral there, um, and he was looking at how ordinary arithmetic gets off the ground by structuring our everyday language about our everyday experiences. And so the five step process starts with an experience.

Speaker 2 (00:58:33):
It could be a very simple experience like observing two people standing next to each other and asking a question who's taller or who's shorter, and then just making it explicit. And so then in the five step process, students would talk about that little event. They would write a picture about it, right? Their picture of this person standing, I can use Micha and BJ, cuz I know Micha is taller than BJ. So draw a picture of Micha and BJ standing next to each other, um, and write a few sentences and that those, um, steps belong to the students. Anybody can do it. Every single person can do it if you're willing to pay attention. Um, and then the question is, well that, that question of who's taller in our ordinary talk. People talk. So call people talk. We would answer that question like this Micha is taller than BJ, but mathematics won't let you say that.

Speaker 2 (00:59:43):
Mathematics will only let you say Mica's height is greater than BJ's height. And in order to use the math symbols that you would need to use to talk about that experience, that's what those symbols would say. Mica's height is greater than BJ's height, but nobody talks like that. That's not part of anybody's ordinary discourse. Um, as my dad famously said, no matter what language you speak, um, it's not the way people talk. And so math has its own syntax and all scientific disciplines, right? Um, have their own syntax or grammar. And so what the five step process did was to just make explicit for some really important algebraic concepts like integers positive and negative integers, which actually, um, bring the idea of direction into number. So all through elementary school students typically are an answering questions about number of, out number, about how much or how many, and the idea that a number would also talk about which way you're going, isn't necessarily intuitive.

Speaker 2 (01:01:08):
But once somebody makes that explicit, then it's straightforward to see. And of course the which way question, the question of direction is something that students own. It's something that children own and people own as part of our experience. And so what the five step process does is to just link, um, experiences that can become grounding metaphors for, um, mathematical concepts to make them meaningful. And so this, I idea that, um, this is a tool that can be used to help, um, drive math instruction as a literacy, as a basic literacy that yes, everybody can do math.
Everybody actually can do math. Um, and so if we can do it, then we should do it. And actually we need to do it for all the reasons we've been talking about, um, for the last hour.

Speaker 1 (01:02:14):
Oh, the thing that always, uh, engaged me around the five step process is that you're starting with something, a concrete experience. It's just like the best readers construct new knowledge from oil and they add it to their own knowledge. They cons they, they, they add, they construct meaning. And, and, and I think the, the point here is, and that, that I really wanted to make was was we, we, we have ways to help young people construct knowledge and meaning from the world that we can, even for teachers who themselves never had the advantage of getting that we can begin to spend the dollars we have on offering that experience, uh, not just to the students, but to the teachers and inside, uh, the, the training and, and, and technical assistance that goes on in schools. There's a great deal of it. Uh, it it's, it's a marketplace.

Speaker 1 (01:03:20):
And I, I think one of the things we need to do in this country is figure out what are the essentials, what are the things that are must dos and invest in the must dos? And we must have a conversation about that, and we need to bring experts to the table experts from the community because they know what their experience and knowledge is and, and, and what, what, where they are and experts from the academia and experts from the professional realm. So I would hope that, uh, there would be some opportunities in this country to do that kind of work. I'm I'm gonna go now to a question because we are getting close to the end, but I think this is a really important question maybe to try to bring some closure around the question is how do we get the larger society, the muster, the will to have a more inclusive curriculum.

Speaker 1 (01:04:15):
Um, the, right now we have a curriculum that does not invite everyone in no matter how you come to it, it invites you in, uh, based on, uh, perceived sense of, of your prior performance in the curriculum. And so I, I wonder if you all would spend some time talking about how we gonna get the nation to care about this enough, that we can turn on and send BC, and we will hear some conversations about this, uh, so that we can see people in neighborhoods and communities, uh, gathering together, uh, inside their schools and out to talk about this issue of a 21st century access to a quality education and how we make it a civil right, uh, uh, something that we should all expect and that if it's not happening, there's a problem. So I'll open that question and ask you all to burn some closure in the next five minutes around that question. That's on the question list.

Speaker 3 (01:05:24):
Sure. Let me try to be super brief about that because it's a really, um, important and multi-layered, uh, question in conversation. So this idea of curriculum and a national curriculum, we're never gonna have that in our country. We never will. We don't have a federal ministry of education, unlike say Britain and so many other Western countries. So it is gonna be up to each state. The state board and school boards in Texas are going to get to decide, uh, whether the indigenous peoples and impact on them, of both slavery and Columbus is something that is taught in schools. That is true, right? Same conversation is happening in California and too often facts and politics get, uh, get meshed together there. They, I don't know how we change that BJ. I thought I've spent a lot of time thinking through it it is it is, I think will be a residual effect if we can together create the world that you laid out.
Speaker 3 (01:06:23):
One of which this issue is the top of the national and civic and political conversation that you do journal on TV, that you do see movements everywhere. You're talking about why doesn't my school offer algebra or other rigorous courses. Why don't I have access to the best teachers? Knowledge is currency. Why is it being withheld from me? Part of that is about awareness and sharing and conversations like we're having today. Part of that is really trying to figure out this culture shift and turning point moment that our organization, and so many others in the field are trying to study and, and, and figure out. And, and so much of it, as we've said, is building on the shoulders of folks in this room and on, and listening and watching to make this the civil rights issue of our generation. Will we have a federal civil right to an education? Probably not that court that that court case has been asked and answered many years ago. Um, will it be revisited again, for sure. There's seminal cases that might come back up cases around money and cases around the federal government's, uh, need to intervene in poor performing or low funded schools, but the legal Tre to make that happen is one that is slow running. If it happens at all the civic and political and movement stretch to make that happen is one we can all participate in from now

Speaker 1 (01:07:58):
Maha. We've got two minutes, I believe, or so

Speaker 2 (01:08:02):
Mm-hmm <affirmative> maybe. Um, so I think that we have to keep organizing mm-hmm <affirmative>, um, and that it's, it's a problem that's deep and big and, and broad enough that creates lots of spaces and opportunities for us to organize, to organize with young people, with parents, with teachers. Um, and I think it was Charlie Cobb who said yesterday on, on a talk that organizing continues to be available to us, um, and earning our right to work with the people who have the problem to organize around the problem that continues to be available. And if we continue to do so, then there will be a generation of Americans, of young people who do rise up and take this on, um, in the way that your, your, that the, the, um, the questioner is asking about that. I, I, I really do believe, um, but for me, it's about continuing to just chip away and, and chip away and chip away. It's hard to get the country to pay attention for any sustained period of, of Ty on a question like this, that just very noisy. Um, but as rustling said it earlier in the conversation, it is one of the most important issues of, of our generation. And it's not gonna go away. And as long as it's here, people are going to continue to rise up to dedicate, um, really their life, um, to working on the, on the problem that I, I absolutely, um, I absolutely believe that.

Speaker 1 (01:09:55):
Well, I think we have about five minutes left. I thought we only had two. So <laugh>, um, I certainly invite, uh, wanna thank both of you, but I wanna invite both of you if you've got some burning, uh, closing remarks, uh, and want to put them on the table. Now, this would be a good time, uh, to do that. Um,

Speaker 3 (01:10:24):
IHA said it, Maha said it, we have to make this a movement. We have to stand up. We have to understand that something is being taken away from us when we don't have access to these rigorous courses, that there's nothing good in that for us or our children. In fact, it's harmful and
can be devastating. And it's up to us, those that are paying attention to the walk and, and seeing the link between courses like algebra and chemistry and success in life, whether you go to college or not, it isn't coming upon us to make, make that knowledge shared and heard. And again, for the first time in history, and this is where this is where we all need help. How do we seize this moment? This moment, $190 billion going to our schools. We've never had it before. We're never gonna have it again. How do we seize this moment and get a country to pay attention? How do we make our policy makers have to account to us, to me, to you, to our communities. This is how we're spending the hundreds of millions of 15 billion. California's getting 15 billion in K12 influx. Rhode Island is getting, um, over 115 million. And what I've just articulated is the cares act alone. That's not the other stimulus funds that, that, that, that are about all of COVID relief. So we have now the money to do it now is the time to make progress on having the civic will and political will to get it done.

Speaker 2 (01:11:54):

And so that you said that it brings me back to something I wanted to say earlier, cuz I went one way with the question around, well, um, what's one of the most important things to do or if you know, top two things to do. Um, and so it also, you mentioned it when you talked about XQ wrestling about you have the best teachers and if there were one thing to organize around,

Speaker 3 (01:12:19):

Got it.

Speaker 2 (01:12:20):

Um, students, students at the bottom need the best teachers, the country needs to invest in teachers. And so far it hasn't shown the inclination to do so, but it's absolutely not trivial teachers who have the content knowledge who are steeped in the kind of curricular processes that BJ asked us to think about, um, who are experts, who are learners, who are engaged, who are researchers, right? All of that. Our children deserve the best teachers.

Speaker 1 (01:13:00):

Um, boy, this conversation has certainly for me, uh, if I had to offer a closing, one of the things I do every day is work with public sector leaders. I myself was one. Uh, and I can say this to you if we don't begin to think about how we both develop, recruit and sustain public sector leaders who learn the public environment well enough to manipulate it, to make it work on their behalf, to make bureaucracies dance around the issues and the needs that we have in the communities, uh, and under resource and underserved communities, communities of color, uh, communities in rural areas. Um, there there's a lot of a leadership problem we have here is probably enough for a whole another session around what does it take, uh, to stand in a public sector arena and make things happen differently on behalf of people who need for it to happen differently is a question that we need to start organizing around this.

Speaker 1 (01:14:19):

Well, because public sector leaders, if you give me $4 billion, I trust, trust me. When you come back, I'm gonna be accountable for having done something nobody ever did with $4 billion before. That's right. So I, I, I wanna thank each one of you for participating for the work you're doing for, uh, for being a colleague, for being someone that I know is out there in the space that I could reach out to for being engaged in organizations, uh, that are moving are moving stuff. You
know, we're not standing still for, for really taking the time today to meet. So thank you and have a great rest of the day. And thank you to those of you who listen.

Speaker 3 (01:15:07):
Thank you B today. Thank you so much. Thank you. It was great to see Micha. Thank you.

Speaker 1 (01:15:14):
Okay. Everybody

Speaker 3 (01:15:15):

Speaker 1 (01:15:23):
Are we able to talk now?