

Vincent Munoz:

I think what we need to do is explain how our principles of free speech, free inquiry will help serve the cause of justice.

Betty Friendan:

The First Amendment, the constitutional freedom of speech and freedom of conscience that is the bulwark of our democracy.

Bettina Apthekar:

There was a passion in what was being said. Affirming this what people considered a sacred, constitutional right, freedom of speech and freedom of association.

Michelle Deutchman:

From the UC National Center for Free Speech and Civic Engagement, this is SpeechMatters, a podcast about expression, engagement, and democratic learning in higher education. I'm Michelle Deutchman, the center's executive director and your host. The rate of societal change can be mind-boggling, including the explosion of artificial intelligence into what feels like every part of life.

It allows us to retrieve information at an ever-increasing speed. What are current fashion trends around the world? Grab a summary of a book you didn't have the chance to read for book club. Get an assist on how to approach a tricky email or text message. The ability to utilize AI for learning has left schools and universities grappling with how this technology will impact how professors teach and students learn.

How we understand and communicate with one another, and how the public evaluates the value of education. Joining us to unpack how to productively integrate AI into American schools is Jean-Claude Brizard, an education leader and reformer. He is the president and CEO of Digital Promise, a global nonprofit focused on harnessing the power of technology to improve learning.

Before we dive into our discussion with Jean-Claude, let's turn to class notes, a look at what's making headlines. In the ongoing battle between Harvard University and the Trump administration, there is a significant update. Last week, the Department of Homeland Security revoked Harvard's Student and Exchange Visitor Program certification, which authorizes the university to enroll international students.

This move will have a considerable impact, given that international students make up a quarter of Harvard's enrollment. In response, Harvard filed a lawsuit arguing that the administration's action violates the First Amendment. This past Friday, a federal judge granted a temporary restraining order allowing the university to continue enrolling international students while the case proceeds.

In a different conflict, this one between the Trump administration and Columbia. On Thursday, May 22, the US Department of Health & Human Services Office of Civil Rights announced that Columbia University violated Title VI by demonstrating deliberate indifference towards student-on-student harassment of Jewish students from October 7, 2023 to the present.

Although the findings did not result in any announced penalties, the Trump administration is already withholding more than \$400 million in federal grants and contracts from the university. Also, last week, a federal judge blocked the Trump administration from firing more than half of the Department of Education's workforce, around 2,000 employees, in Trump's continued attempt to make good on his promise of shutting down the Department of Education altogether.

Lawyers for the administration argued the reduction in workforce was needed in order to improve efficiency and accountability. A federal judge in Massachusetts disagreed, holding that the administration's true intent was to effectively dismantle the department without congressional approval. This decision is seen as a rebuke to the administration's attempt to refashion the federal government's role in education.

Now, back to today's guest. Jean-Claude Brizard is president and CEO of Digital Promise, a global, nonpartisan nonprofit focused on shaping the future of learning, and advancing equitable education systems by bridging solutions across research, practice and technology. Formerly, Jean-Claude served as a senior advisor and deputy director at the Bill & Melinda Gates Foundation, where he focused on PK-16 education.

Before working in the world of philanthropy, he served as chief executive of Chicago Public Schools and, prior to that, as superintendent of schools for the Rochester, New York School District. His experience also includes a 21-year career as an educator and administrator with the New York City Department of Education, where he served as a regional superintendent as the system's executive director for its 400 secondary schools. Welcome, Jean-Claude, thank you so much for joining us today.

Jean-Claude Brizard:

Michelle, thanks so much for having me.

Michelle Deutchman:

And in addition to everything that I just shared with you, I just learned that he's also a pilot, and we were actually talking about the use of AI in that area. So many different vantage points that you've had about this technology. All right, so back to the issue at hand.

When I was preparing for our conversation today, I learned that Digital Promise is a result of bipartisanship, which is something rather unheard of these days. It was authorized by Congress in 2008, signed into law by President George W. Bush, and then, formally launched by President Barack Obama in September 2011.

You joined in 2021, right as pandemic learning loss and gaps were coming into clearer view. And of course, most recently, you've been channeling your tremendous education expertise into how to harness the power and possibility of generative artificial intelligence.

So can you start by sharing some of Digital Promise's current priorities, and how the congressional authorization at its core might impact those?

Jean-Claude Brizard:

Michelle, first of all, my board, until very recently, were appointed with the original Board of Digital Promise, appointed by both sides of the aisle. So, we bring the perhaps expertise and point of view that really crosses right and left, red and blue across the country. My experience in the classroom and leading schools and school systems, has been foundational to everything I do.

The work we do at Digital Promise, I push to take us back to all the core work that we need to do to make sure we close gaps in literacy, mathematics, et cetera. One of the things that I pushed really hard when I got here, gosh, more than four years ago, was this idea of redefining success. Let me explain that in two different ways.

One is that I've been a fundamental believer that math and reading proficiency are means to an end, they're not the end means. And there's so many of our schools that that is the North Star. When you look at the life outcomes all of us have, especially those of us who have had the

opportunity to have really good jobs and good careers, the math and reading proficiency was a pathway to getting to where we want to get to.

So that has been showing up very, very strongly in the work that we do on pathways, economic mobility. In fact, our goals speak to that, economic mobility, agency and well-being. But we also focus on the kinds of classroom level work, both higher ed and K-12. For that matter, early learning, K-12 and higher ed, that really propels a young person or learner toward that kind of success.

So that through line has been a big part of the efforts here at Digital Promise. Let me add one more layer to that. We also have come to really understand through learning science, that the nonacademic competencies, often is implicit in middle-income communities or families, need to be explicitly taught in our schools.

Things like perseverance, tenacity. The things that beget success are things we have forgotten about, frankly, in our everyday teaching and learning. We're trying to make that much more visible and explicit in what we actually teach. It's the internal efforts, it is the external stitching of systems to really propel.

We describe those young people as those who have been historically and systematically excluded, but frankly, we serve all kids. We serve kids in South Side, Chicago, in Appalachia, in more affluent communities in New Jersey. We do it all in supporting all young people toward that kind of success, but we do over-index on those that have been historically marginalized.

Michelle Deutchman:

Thank you for that answer and for setting the table that way. And I also really like how you are talking not just about skills, but about values and how those go hand in hand. So today we're going to focus on AI, and as you well know, since OpenAI launched ChatGPT in 2022, emotions have run pretty high about this technology.

Excitement, anxiety, optimism, foreboding, just to name a few, have filled the news and our social media and our inboxes. And that includes how it may or may not transform education for better and worse. I want to start with the better part of the question and ask you, I know you've said that you're bullish on AI and what it can do for education, and I'd love for you to expand on that.

Jean-Claude Brizard:

I am bullish on AI and the possibilities, frankly. First of all, I'm bullish on tech, on edtech in general, we've got a lot of work to do there. Perhaps my own personal experience as a teacher may provide some highlight to that. I taught physics in New York City for years in a vocational high school of all places.

My class averaged 90% to 100% pass on the New York State exam in physics, because I discovered the power of technology in supporting what may appear to be amorphous or complex in making that concrete for kids. I discovered the Vernier software suite with the probes and the planks and everything else, that really transformed the way I did laboratories in physics.

You may remember your high school class where you did the cookbook lab. You followed a procedure and at the end, you have no idea what you did, and you're asked to analyze what you did the week before, et cetera. What I did with Vernier, thanks to the City University of New York and their donation of equipment, we completely flipped the paradigm.

The experiment lasted 90 seconds, maybe 15 seconds the discussions and arguments. The inquiry lasted half an hour, so completely flipped the script. And I'll tell you, my kids began to really understand what it meant for physics. When we take that to today's newest emerging

technology and AI is not the last one. We have quantum computing coming our way, it's a matter of time.

It's still a tech-enabled bottom line. And our bottom line is what happens between teachers, students, families, and content is the Richard L. Moore framework from Harvard. We know that is the most important relationship in education, is what learning science tells us really is critical.

The question of technology or AI, for that matter, is how AI can actually enhance, connect, and accelerate that kind of understanding and learning? How we can take the minutia frankly out of the work that we do every single day and provides a level of acceleration. It can also take perhaps concepts that may be difficult to understand and make that real for kids.

Let me qualify that. I taught earth science in the middle school, and I used to teach plate tectonics. I had the models in my hand, I'm showing and moving things for these poor eighth graders. They're never seen an earthquake. We're in Brooklyn, they've never seen an earthquake. Can you imagine now, think of your days in the Magic School Bus? Can I take those kids? Let's go see the San Andreas Fault.

Let's go take a look and see what is happening there. All of a sudden, what may be complex or difficult to understand becomes real and understandable. I had an experience a few weeks ago at Arizona State University with a dreamscape lab. I walked away walking on air, because I had fully experienced a number of things.

Biology, I experienced art history in a way that I never understood before. My daughter has a minor in art history. Now I appreciate much more the way she was describing architecture to me, especially medieval architecture. We walked through a structure in Turkey that changed over 1,000 years. And through VR technology, I experienced the art history personally.

And now I fully appreciate more now when I walk into a temple, whatever it may be, around the world, so that kind of experience can be enhanced. It could change mental models, and I think of American history. One example I used in this Pennsylvania keynote I gave a few weeks ago, I ask the audience, "When you think of the American Revolutionary War, who do you think about?"

I got the typical George Washington, Thomas Jefferson, et cetera. This project at ASU is walking you through understanding the real Americans who fought in the Revolutionary War. You are interviewing, you are talking to, you are engaging these individuals, were long dead.

Think about what that could do to a number of different things that we have in history through showcasing what really needs to happen. I think AI has the potential, beyond the efficiencies and the acceleration, has the potential to really provide a level of engagement that we know is so important in teaching and learning.

Michelle Deutchman:

I have a strong feeling that if you had been my science teacher that I might've enjoyed science more.

Jean-Claude Brizard:

Well, I know you would have because I taught physics. I'm a chemist by training. You have to have fun as a teacher.

Otherwise, that kind of excitement does not transfer to your kids.

Michelle Deutchman:

Well, and I think if it had been more accessible for me in high school, then maybe I wouldn't have spent all of my college career trying to avoid taking math and science.

Jean-Claude Brizard:

Yes.

Michelle Deutchman:

At the beginning you really talked about wanting to elevate the experience and enhance the experience, especially for groups that have maybe not always had the same access to education.

And I'm curious if you could talk about how you think AI can assist in meeting that goal particularly?

Jean-Claude Brizard:

Yeah. It also goes back to basic access to technology, which I know has been a challenge. I just came back from visiting with our Global Cities Network. Some of our League of Innovative Schools here in the US, were in Uruguay, in South America, looking at the country that leveraged our assets of Digital Promise.

And they have completely closed the digital learning gap, and now folks are focusing on AI across the country by teaching computational thinking, something again, we have defined here at Digital Promise. But when you see that kind of strategy that is done across an entire nation, rural, urban, suburban, with deliberately making sure that kids have access to one-on-one laptops, a way of fixing those laptops, and the pedagogy follows.

I saw a class in computational thinking being taught by a teacher in Argentina teaching a class in Uruguay, so they've moved the pedagogy. We can do this in the US, and we've seen that kind of example here in the US. We have an amazing structure here called the Verizon Innovative Learning Schools program that provides one-on-one technology in nearly 700 schools across the country.

It is a model around technology access, and as AI is being overlaid on that, you provide that full access to every kid. The last FCC Chairwoman Rosenworcel used to call it the homework gap. Can we close the homework gap, giving kids access to what is happening at home as well too? AI is already showing up in edtech tool, but the work of AI shows up in a concrete way, in a way that provides that kind of access.

That closes what we call the digital learning gap, not just digital gap. The second thing I would push, and there are two districts I'm very proud of we're doing this work. One is in Talladega County, Alabama, a rural school district, the other one is Fayette County in Pennsylvania, we're teaching computational thinking across the core content.

In Talladega, I walked into a pre-K class and I saw kids learning about the kinds of skills that are required to transcend technology, algorithmic thinking, pattern recognition, debugging. This was in a four-year-old, five-year-old class. I drove across town with the superintendent in a senior-level, honors-level Shakespeare class, and saw very similar discussions happening at that particular level.

My point is that when you think about access, it is not just the machine and the tool, it's the pedagogy. It's the teaching and learning. It's teaching young people the skills and competencies that will allow them to navigate not just today's world, but tomorrow's world. That kind of full access is a foundation for closing gaps. Otherwise, we're going to exacerbate the challenges that we've seen in the last 50, 60 years in this country.

Michelle Deutchman:

Thank you. It was intentional that I asked about the positive aspects first, because I do feel like often when at least I read about it, it's really like a long list of negatives, and maybe there's a few references to the possibilities. I really wanted to focus on that.

But I also do feel like I have to ask, we talked about the better part, and now I think we need to talk about the worst part. Because as you know, there's a deep well of concern about the potential for devastating consequences, not just to education by AI.

For example, last month, there was an article in The Chronicle of Higher Ed that was titled, Is AI Enhancing Education or Replacing It? Technology should facilitate learning, not substitute for that. I'm curious, do you think these kinds of fears are overblown and why or why not?

Jean-Claude Brizard:

The fears are not overblown at all, and they are real and we are seeing it. We're trying to do whatever we can in collaboration with others, including ISTE, CoSN, all of us in edtech in this country to try to push this. Even the National EdTech Plan, the last one that was published, were very clear about making sure that folks understand the ramifications of edtech and AI and not doing that.

First of all, we know education is human development, and I can give you an example of an experiment I saw a few years ago. Without the full understanding of the newer biology, the newer science, the learning science, how people learn, they're going to somewhat try to replace teachers and not augment the intelligence of teachers or the pedagogy, thinking that a machine can teach.

They can enhance, they can accelerate, they can support, they cannot replace the human, because you need a human connection for that kind of work. Let me add two more things. One is that there are certain human ingenuity skills that we know has to be taught. You can go back to what begets success. A machine cannot teach you perseverance, it cannot teach you tenacity.

All the nonacademic development that we know is so critical for learning and learning science, it cannot be automated. At the same time, we do know what can be automated will be automated. In preparing young people for the future, we have to think about that as well too, so they don't end up in dead-end jobs. I walked into a school that had truck driving as a pathway, I should have left with a heartburn.

I was like, "Oh my God, it's a matter of a few years before trucks are all fully self-driving, so what are you preparing these high school juniors to do in the future?" But go back to the learning science. I was at the I-LAB at the University of Washington a few years ago when I was at the Gates Foundation walking around with Pat Kuehl, who's the executive director for the center.

She showed me an experiment where they had a mom and a baby and the mom reading to the baby, and both had wire meshes on their heads. You can see the neurons firing. Then the exact same experiment put the mom in a different room, had the mom on video with the child, the exact same book, et cetera, nothing happened. So I don't know, we don't know the answer yet.

But we do know there is a human connection here that is required for the level of brain activity that we need for learning to actually take place. There's a lot happening in the schools of psychology are teaching us about how people learn, and the importance of the human connection in teaching and learning. That for me is what worries me.

You have folks who are technologists, who don't really understand the learning process, are developing tools to bypass the human being, thinking they can do this, and that terrifies me. I thought you would begin to see that kind of attempt at replacement in developing countries. That was my biggest worry.

Lo and behold, it was a school that just got authorized in Arizona, that aims to replace 85% of teachers, in one of our states here in the US in, "first-world country." That really is what gives me heartburn that folks who are doing this, don't really understand or appreciate neuroscience, neurobiology and learning science.

Michelle Deutchman:

I'm still thinking about that experiment about the neurons, that is really fascinating. One of the things I think we have to touch on is the issue of cheating. And again, I think this is something that has been so we've been saturated with it. And I don't know if you listen to Ezra Klein, but a couple episodes ago, Rebecca Winthrop was on and I will share that I did not understand the breadth of possibility.

First, the student is putting the prompt to write the essay into one platform. Then they're going to somewhere else to make sure it's checked for plagiarism, then it's going somewhere else to humanize their ChatGPT essay. It just goes on and on and on. And so I'm wondering if you could talk a little bit about cheating and the concerns about cheating, and who needs to be making changes? Is it about how we use the technology?

Is it about how teachers integrate it into classrooms? Is it about talking to students about how to use it responsibly? Share with us.

Jean-Claude Brizard:

My goodness, there's so much here. First of all, I'm a massive friend of Rebecca Winthrop. I just saw her a few weeks ago here in California. She's one of my heroes. I really like Rebecca. I do listen to Ezra Klein. Let me just say that when folks are worried about cheating, for me, it means your pedagogy is not elevated and I can qualify that.

When I was a teacher of physics, I had one of my students, who is now a professor of physics of all things. He gave me the answers to one his cookbook labs in my first few years of teaching before I discovered the technology solution, and he had a perfect 0% error on his experiment. The data was absolutely amazing.

And I pulled him aside, I said, "Salim," I said, "the machines you're using have built-in errors. There's no way you got 0% on the error." He laughed because he was smart enough to back map and create a dataset from a 0% error, smart kid. Look, learners and people are going to do whatever they have to do to create the conditions for their success.

If they're smart enough, frankly, to make sure they're building errors, including the possibility of cheating, or et cetera, they're going to build that in. We do know the tools, frankly, that are being used to check for plagiarism are not perfect. There's lots of errors built into that. I know young people who are getting blamed for plagiarism who were not doing that.

Let me give you one more example. I just came from my kid's middle school, elementary, middle school, what they call a portfolio day. My nine-year-old showed me he had written a script, he read the whole script to me. And then there was an AI feedback to the script, and his teacher's feedback side by side, and he explained the difference between the two.

At the end I said, "Which one do you prefer?" He goes, "My teacher's." I'm like, "Why?" He goes, "It was more depth, it felt more humanistic," was exactly his word. He's nine, he's almost 10. For me, that is a school and a teacher who is embracing a technology, and leveraging the technology to teach someone about how to use the technology, and have elevated her pedagogy.

That's what we need to do both in terms of assessment and pedagogy. When I was a first-year physics teacher in New York City, the graphing calculator was banned as a tool in the classrooms

because it was seen as a cheating tool. And fast-forward, I became head of high schools in New York City.

And I remember getting the email from our chief of staff who said, "How quickly can you buy TI-83s?" I said, "What's going on?" He said, "Board of Regents in New York are just now mandating the tool on the assessment." In one week, I spent \$13 million in buying TI-83s for New York City. Had to figure out which kids couldn't afford it and do it very quickly.

But one thing changed on the assessment, one line, "Show your work." That was it, that was it. My point is that if we elevate pedagogy where you either have the children using the tool or you know they're going to use the tool, to get them to do something that only a human can do. And I can, if we have time, give you examples of what that could look like in pedagogical practice.

But just like any technology tool that comes our way, the question is what do we need to do to move our pedagogy and lift it, so the tool becomes a tool and not the answer to the question? You give a child a five paragraph essay, which is nonsense by the way, go to Gemini, go to ChatGPT. You name the LLM, it's going to write the essay for them.

But you ask them to analyze, explain with a partner, et cetera, and use the tool to juxtapose two different positions on that particular, controversial question. Now you're leveraging the tool for a different kind of pedagogical practice.

Michelle Deutchman:

Okay, so a couple comments. First of all, you sound like you have a very savvy, young adult coming up in the world. Second of all, I did want to make a note of who Rebecca Winthrop is so that our listeners can benefit. She's the director of the Center for Universal Education at the Brookings Institute.

I wanted to mention that. And then going back to elevating pedagogy, a couple more questions. One of them is that this sounds like it's really the responsibility of the teacher. One of the things I want to ask about is what responsibilities do students have?

And how, especially in a higher education setting, would you say that faculty can help students understand either literacy issues and responsibilities, especially at scale? And we're talking about not a classroom where there's 30 or 40 kids, but these huge lecture halls, especially in large public institutions.

Jean-Claude Brizard:

Yeah. I think it's the responsibility of all of the above, institution, professor, teacher, and learner. But again, I would argue that the weighted responsibility is more on the instructor and the institution, more on the instructor. Learner has to be taught of the importance. Let me come back to the aviation piece for a second. The plane I fly, it's very automated.

And some of the other planes that are more expensive, can land themselves. Every plane you're flying commercially can land itself. And if you are not careful, your skills can atrophy by just sitting there letting the machine do everything. I know good pilots in their training and even in their everyday flying, every once in a while we'll do a hand-fly landing. They'll hand-fly the plane to land it.

They know they've got to keep their skills sharp. We call them sticking water skills. They got to remain sharp, otherwise, you lose some of that kind of automaticity that we didn't have in education. When you also look at the workforce that is emerging right now, again, what can be automated will be automated.

The question of how you use technology to do something different, something that's more elevated in the workforce. Young people or learners need to understand they've got to keep those

skills sharp, and really understand that the machine is an enabler and a supporter. It goes back to this idea of teaching computational thinking in the grade levels to get you there.

That kind of teaching for understanding that those skills and competencies are critical for success, of continuing success, is part of the pedagogy that we have to have in our schools. The idea of being a lifelong learner means you got to keep learning. How do you keep learning is important, otherwise, you lose the same way you could basically calculate it.

If you never add two numbers together and you never do it, you lose that kind of, again, automatic response. But I want to come back to the pedagogy, which is why the institutions, school systems, universities have to create those kinds of avenues and opportunities to learn all kinds of competencies and skills. Not just can you do history? Can you do Calculus II?

But do you understand the beauty of these mathematics? Do you understand the beauty that is physics and science, et cetera, or even history? Hanging out with my daughter in Montreal, walking into the cathedral, and her going nuts about how they had renovated the Notre Dame. That was explicitly taught to her about how she got to appreciate art history in every form.

It is the institutions have to create the structure. The professors have to understand that they're teaching a human being and developing a human being. The learner need to understand too, that you can't outsource your intelligence to a machine.

All that, I think, is part of the work that we need to do, frankly, to stay ahead of the kinds of technology innovations coming, that is in the water system right now. It is not tomorrow.

Michelle Deutchman:

Right, it's here. You mentioned the graphing calculator, and I was actually going to reference that. Because I had read that you talked about that, about how that was an example of something that went from being something that was forbidden to use, to being something that you needed to have.

And it made me think about how education and pedagogy has had to adapt through many decades and many iterations. And I wondered if there were any other historical examples that we could use to either learn lessons from, or to look back at so that maybe we aren't as afraid as we look forward?

Because I do feel like there's a lot of fear, which I think is natural when people don't understand things the way that they want to.

Jean-Claude Brizard:

It's a great question. First of all, AI has been around since 1975 in education, so it's not new. I think what's scaring people is the pace of acceleration, I think, is what's terrifying people. It's hard for me to think very quickly of other kinds of very specific examples, but tech has been here.

And what's different today is that level of acceleration, and the fact that many instructors, professors, and teachers feel they don't have any control as to what is happening. The technology is moving faster than they actually are. There are examples perhaps I would argue it may be not in education. Again, going back to another love I have with the aviation.

You think about the kind of ecosystem that exists within aviation that demands a level of professional learning or continuing learning, which we don't really have baked in a concrete way in our education system. We do professional development, but tends to be throwing spaghetti at the wall. But when you look at, for example, the way in which airplanes have evolved and they continue to evolve, becoming safer.

As required, a set of continuing learning from pilots, controllers, et cetera, that even the certification process, the credentialing process has kept up as well too, to making sure that every time a new type of plane comes in, there's training policy. Every six months, we're going back to training.

We have to have that kind of perhaps structure and education system to making sure that our skills won't become esoteric, that we remain on the forefront of understanding. Whether it be learning science or technology, all of it frankly, is part of the work that we have to do in education.

Michelle Deutchman:

I really hear that, it's about how do you make the continuing education meaningful?

Jean-Claude Brizard:

Yes.

Michelle Deutchman:

As an attorney, every three years you have to complete a certain amount of legal education. And the truth is I think a lot of people end up listening to 20 hours of webinars a week before, and is that meaningful?

Probably not as meaningful as something that would be a little bit more intentional, so I think a lot of what you're talking about is intentionality. About how we think about the technology, and then how we teach about it, and then how we use it.

Jean-Claude Brizard:

Can I give you a belief? You just triggered the memory too. I'm thinking about both cellphones and laptops in schools, social media is another. We've not been prepared for anything. I've been in classrooms with a laptop, the one-to-one technology, the screen becomes a substitute.

It goes back to the full integration and the foundations of teaching and learning where you see wonderful work happening. People see it as a tool to be used to enhance the work that they actually are doing. But the pace, again, of what's happening right now is what is terrifying people.

Michelle Deutchman:

Well, and I also think there, you just triggered me to think about something about cellphones. Because my kids and a lot of children in LA and other districts, the schools had to invest a huge amount of money in these Yondr pouches. I love the intent of it, which is that the phones are not accessible. But even my seventh grader was like, "This is awful. Our school doesn't have all of these things."

Why do we have to invest all of this money into basically keeping the technology away from the kids? So it just raises a lot of issues. In some ways, that feels like it was something that had people been able to foresee a little bit better, that we might've been able to integrate something in earlier on.

But it is hard when you think about a limited pool of resources like that being have to be utilized, not so much to enhance the technology, but to prevent people from using it. And of course, in this case, I think it's great. I don't want my kids to have their cellphones at school, but it does create a dissonance, if that makes sense.

Jean-Claude Brizard:

It does, it does. And I've seen people offer solutions beyond the pouches. When I was in New York City, we were forcing principals to collect cellphones at the door. It just puts a burden on the school leader, that had to collect these things, and when they get lost, kids get upset, et cetera. So I don't subscribe to this idea of banning anything.

The question is how do you leverage it? Look, my 13-year-old, my 15-year-old both have cellphones. They know enough never to take it out in the classroom, and that's the culture that's been built in that school. We don't take it away, but these are the rules we follow. Let's follow these rules.

And again, the culture exists in that particular school where it's not an issue. But in some places you see it as an issue, and you get to this banning, cascading of circles of challenges we're giving to the teacher and the principal.

Michelle Deutchman:

Well, and of course, once you ban something, it becomes even more interesting. My understanding from my 15-year-old, is that students spend a lot of time trying to figure out how to open up the Yondr pouch and use the phone, and then put it back before they're caught, but that's a whole different topic.

I do want to, especially since so many of our listeners are members of the higher ed sector, I wanted to ask a couple of things about that. Right now, we're seeing a lot of cutting, slashing of federal funds that are going to research and development and all kinds of areas.

I'm wondering if you could talk a little bit about higher ed's role in terms of AI research and development, are they a big part of that? A small part of it? Are they working in collaboration with the private corporations? If you could talk a little bit about that landscape.

Jean-Claude Brizard:

No. There are huge responsibilities, frankly, yesterday on NPR listening to the discussion on AI and higher ed, and professors and students who are catching their professors using AI to grade, et cetera, actually getting upset saying, "I'm looking at my tuition. I paid 8,000 bucks for this class. Why?" So it's on both sides of the equation.

And it goes back to this idea of elevating pedagogy and expectation, and learning how to use the technology actually getting there. But beyond what we've discussed already in K-12, I think that the same thing matters in higher education. Perhaps a bit more so, because those learners are closer to the workforce than a child, say, was in the ninth grade.

And when you look at what is happening in workforce and AI, there are clear alignment in issues in preparing a young person for economic mobility, because the kinds of careers we know exists are changing every single day. Even law, frankly, is changing, medicine is changing every single day because of AI.

How we prepare a young person to harness the power of a machine versus preparing for a dead-end job is a big part of the conversation. In the research, because we have a large research team here at Digital Promise, one of my co-leads for researchers, a PhD in computer science, and he is an expert in AI.

He's been playing with AI, doing AI work since the '80s. In the work that he actually has been doing, we know there's a massive responsibility in really informing two things, informing the sector what the technology is, how it can be used in pedagogy and curriculum. Again, my obsession around how we can reinvent curriculum and instruction using GenAI is the kind of research we need to do.

We need to understand, again, what is happening between the school of psychology and the school of education. So educators really understand what is happening around learning science and brain science, and bring that back to the pedagogy in the technology. The kind of pre-service work that needs to happen for teachers, I think, is huge.

Those schools of education that are part of university or training the next generation of teachers, need to understand that they cannot be afraid of these kinds of tools. They have to harness and leverage it. That kind of pre-service work is so critical and important. Again, those same institutions provide license or the training for principals.

A big, big part of that work, looking at entry-level jobs beyond university and college. Beyond those kinds of preparation for learners, I think, universities can lead the discussion in this country. Yes, what is happening right now at the federal level is heartbreaking. It gives me heartburn, to be frank, when you're watching research institutions being gutted.

As a country, we've led the world in these kinds of conversations. I travel, I travel quite a bit in many countries of the world, they look to the US for leadership. We cannot lose that. It is terrifying. But I think universities can lead in our discussions around how we leverage technology. How we understand how to teach and what to teach, how to do it better, frankly.

I would argue that professors in higher ed can teach us in K-12, many of us in K-12, what we need to do to prepare young people for what's coming after. Not the least of which is are the kinds of nonacademic competencies that will now provide success in higher education. When you look at the numbers, there's lots of issues with kids who are historically marginalized, who walk into these R1 institutions and tank.

It's not the academic preparation, and we have lots of evidence for this. It's not the academic preparation necessarily, it's navigation skills. When you have a child who may have maximized their environment in a particular district, being a valedictorian at ex-school, and they're walking to an R1 institution and they lose, they're lost.

They can teach us how to do that and prepare young people for the future, access to these kinds of institutions. There's a lot that can be done in terms of really looking at research, research and technology, and pedagogy that really can inform the work that we do in K-12 or P-12, for that matter.

Michelle Deutchman:

I really like that you are talking about it very holistically. I'll say just through the trajectory of this conversation, I felt more excited and a little less fearful. In terms of the folks in higher education, usually at the end or close to the end of each episode, we ask our guests to help provide something more pragmatic or practical that one might do.

I'm wondering if there's things that you could say to people who teach or work or learn in a college and university, that they might do to improve their relationship to artificial intelligence technologies? And that might be something that's the same for all stakeholders, or it might be something different for students or teachers or staff.

Jean-Claude Brizard:

Yeah, I've given the same advice to K-12 educators. If you are in a research arena, you do this kind of work, you know what it is, but I push on educators to do two things. One, please be crew and not passengers in this effort, because if you're a passenger, you're being taken for a ride, but when you're crew, you're helping build.

It is part of our DNA here at Digital Promise and do a co-creation in centering the practitioner in the research and the development process. So I tell people, play, get familiar with the

technology. Don't try and keep up with the latest version of Gemini or ChatGPT, you're going to get lost. Let the technocrats or techie folks worry about that.

And there are tools being generated that bring all these LLMs together into one place. But play, get excited, embrace the technology so you know what your students are doing. And actually, because they're running, my nine-year-old, he's not using AI yet, thank God, outside the school.

But my 13-year-old, when he was 12, told me, "Dad, they gave me an essay. Every one of my classmates used ChatGPT to do it. I didn't. You should be proud of me." I said, "Okay." So I had a talk with his teacher about can we pull up the pedagogy a little higher? But play, get familiar, test it, more importantly, focus on the human ingenuity.

There are skills that we know only people can do, humans can do, and many of them are malleable. We can teach them. Make sure they're part of your pedagogy, make sure they're part of the syllabi, to make sure that we are teaching in a way that prepares young people for the next-generation careers. And the kind of tenacity we know is so necessary to be able to be successful.

Those of who are successful, we know how to navigate. We do it all the time. Learn how to manage the machines, play with it, get familiar with it and embrace it, I think, is what I would push.

Michelle Deutchman:

Thank you. And it's even interesting in some of the languages that you're using, I'm really feeling like it connects to your pilot analogy. Even the navigation, which is literally what you do when you're in the air, but it's also what each of us has to do every day as we move through the world.

You have been very generous with your time, and so I will just end by giving you, before I thank you, a chance, if there's anything else you'd just like to add or touch on that we haven't been able to cover, now would be the moment.

Jean-Claude Brizard:

Can I choose and say too, go back to what you just said on aviation and navigation? When you fly somewhere, the destination more often than not, it's typically nonnegotiable. The way you get there, you meander and navigate weather and everything else. The same thing applies to education. We've got to navigate.

When I was getting my instrument rating, I was told, "The moment you think you have nothing to do, the sequence of the events for a crash starts. Stay ahead of the airplane. The faster the airplane, the further ahead of it you got to be." We got to the same thing here in technology, and let me close with this.

Andrew McAfee was a professor at MIT, was an economist at MIT. 10 years ago, had these TED Talks, "The machines are coming for our jobs." It was really amazing. I loved them. I used to ask educators, "Are you terrified or excited when you read this, when you watch his videos?"

More often, they were terrified because you can't meet basic proficiency, yet these machines were coming very quickly. It's happening. And what he said though was that at every technological revolution, we always left the generation behind, but we always maintained near full employment. We kept the population behind.

Let's not do that this time. Let's make sure we provide the equal access to high-tech to people, so they can get access to the best jobs coming our way in the next number of years.

Michelle Deutchman:

I like that. We're ending on a high note, and I just want to thank you so much for joining SpeechMatters and sharing some of your wisdom with us.

Jean-Claude Brizard:

Sure, thank you. It's been a pleasure.

Michelle Deutchman:

That's a wrap. Thanks so much to Jean-Claude Brizard for joining us.

For those students who are spending their final days on a university campus and are graduating, the center shares its congratulations.

For all those listening who poured their time and energy into educating our young people, thank you. Talk to you next time.