

Transcript — Empowering neurodivergent students through inclusive STEM

[**Description:** A person with wavy strawberry-blonde hair, wearing a black top and a maroon blazer, seated at a table in a school lunchroom.]

Kara: Hi, I'm Kara Ball. I'm an Academic Officer in Special Education and STEM at Teacher Created Materials.

[**Description:** A STEM classroom showing desks and bulletin boards with science drawings and math terms.]

STEM education is so important for shaping the next generation of inventors and innovators, especially for kids who learn and think differently.

[**Description:** A teacher and two students working on a project in that classroom.]

We have the unique opportunity to break down learning barriers and to give kids a chance to thrive in science, technology, engineering, and math.



[**Description:** That same teacher walking into the classroom and sitting down at their desk.]

[**Description:** A person with long, curly hair, wearing a white button-down blouse and tan cardigan, seated at a desk in a classroom.]

Lauren: Hi, my name is Lauren Maycock, and I'm a STEM Educator at a public school in Queens, New York.

[**Description:** Lauren cutting strings; putting highlighters, scissors, and other supplies into caddies; and with her students working on a project in the classroom.]

We will do maker boxes, where I just have random building materials that they can use to build different things. And they really do enjoy the freedom that they have to express their creativity by building different objects.

[**Description:** Lauren and her students working with red solo cups, motors, strings, wires, batteries, and screwdrivers to test, fix, and build objects.]

We were able to make scribble bots using red solo cups, markers, and simple motors. And that was something that I really enjoyed doing with them because it was very simple for them to do.



There was a lot of collaboration on the part of the students, and I really enjoyed them just using their creative muscles in order to create really wonderful pieces of technology.

Kara: It's these hands-on learning opportunities that kids really love.

[**Description:** Lauren laughing with her students as one of the objects they built flies out of her hand as they're testing it.]

And the amazing part about STEM is failure is celebrated and recognizes the natural part of the learning process, where in other academic areas we don't see that.

[**Description:** A student putting batteries into a motor. Another student cutting tape and taping a highlighter to a red solo cup. Both students taping the motor to the bottom of the solo cup.]

The resiliency that you learn through STEM education is something I have always found as a strength in my students who learn and think differently. They have the ability and the willingness to persist, and to productively struggle through things more than many of their peers.

[Description: Lauren writing in a notepad.]



Lauren: It's OK to fail and try again. And that's really what STEM emphasizes. It emphasizes that we keep trying until we find a solution to a problem.

[**Description:** Lauren with her students laughing and testing out the scribble bots on a sheet of paper.]

Kara: Research actually shows that proper STEM instruction for students with learning and thinking differences can lead to increased college attendance and employment opportunities.

STEM educators like Lauren and I are a part of that equation.

[**Description:** Different shots of Lauren in her classroom. Opening a book on her desk. Standing next to her desk smiling.]

Growing up with dyslexia and dyscalculia, I felt like people would talk about me in terms of all the things that I could not do, rather than what I could do.

It was my science teacher, Mr. Dalton, who would ultimately be the reason I became a STEM education teacher. He was somebody who, for whatever reason, looked at me as a less-than-C-average student with an IEP and said, "Let's give her a shot." And now I get to do the same thing for my students.



[**Description:** Different shots of Lauren and her students working on and testing the scribble bots in their classroom.]

That's the opportunity that we have as educators, to not only inspire our love of learning but to also nurture the unique strengths of students who would otherwise be overlooked.

I hope you'll take something from my story, and feel motivated to help your students thrive through an inclusive STEM curriculum.

[Description: <u>Understood</u> logo and <u>3M</u> logo.]