



“Before, it would be these constant fights. You have to do math – I don’t want to do math...Now she’s asking ‘Can we do math please?’  
—CHAVA, RACHEL’S MOTHER



## CHALLENGE

Rachel is a technology-loving, New York teenager who enjoys shopping and spending time with friends. An avid learner, she is working towards earning her high school diploma. Rachel has developmental, motor, and speech and language impairments that shape her learning needs and comprehension. To meet these needs, Rachel’s parents established their own school where she receives personalized, one-on-one instruction.

Heavily influenced by the work of math education expert, Dr. Jo Boaler, who emphasizes the use of visual materials and creative problem solving for math instruction, Rachel’s math program focuses on learning how to think about math. Rachel reads a problem, draws out a plan, and acts on it.

Rachel has difficulty writing, so pencil-and-paper mathematics won’t work for her. Digital math applications that require use of a mouse or trackpad similarly pose a challenge due to the fine motor abilities required to operate them. This limits the options available for Rachel to do math.

## SOLUTION

Benetech’s Mathshare platform enables Rachel to do all aspects of her math program within one workspace. Rachel uses the online math platform on her touch screen laptop. After she reads the problem, she thinks through her approach and uses the sketchpad to create a visual. Then, she works through the plan step by step, explaining her thought process with a note.

Rachel likes how Mathshare keeps her work organized and neat: each step of the problem is automatically aligned with the previous steps. In other applications, Rachel would have to line up each step herself, which was both tedious and distracting.

Rachel’s mother Chava notes that the biggest benefit of Mathshare is having all of the features that Rachel needs built into one platform. Rather than having to toggle back and forth between a sketchpad, notebook, and math app, Rachel can draw, do math, and describe her work all in one program. Without having to expend mental energy switching between platforms and keeping their distinct processes straight, Rachel can focus on the problem in front of her.

## IMPACT

Rachel's teacher, Mr. Louis, has made a dedicated effort to utilize technology and incorporate it into instruction. Equipped with the right tools, and a math program that works for her learning style, Rachel's outlook on math has shifted significantly. While math used to be one of Rachel's least favorite subjects, she now eagerly completes her math assignments.

Chava notes: "Before, it would be these constant fights. You have to do math – I don't want to do math... Now she's asking 'Can we do math please?'" Using Mathshare, Rachel solves problems and explores new concepts with curiosity and confidence.

There is still a long road ahead for Rachel to earn her diploma. Before beginning personalized instruction, Rachel spent many years in a learning environment that was not optimal for her, so she is now redoing many of the subjects that she should have covered earlier in school. Nonetheless, she brings an open, positive attitude to her studies and is making steady progress. She looks forward to earning her diploma and the many doors it will open for her to pursue the life that she wants.

## TRY MATHSHARE TODAY

Benetech Mathshare is an inclusive, problem-solving tool that makes learning easier. With Mathshare, students can break problems into parts, solve them step by step, and take notes to show their reasoning. This makes it easier for students to stay focused and for teachers to follow their students' thinking.

Try Mathshare by visiting [Mathshare.benetech.org](https://Mathshare.benetech.org).

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