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In a new series of blogs, we are going to be introducing you to our team through our own math stories! To kick us off, let's meet ALN Facilitator Tara Trudo.

As a young student, Tara was labeled as “very good at math.” When she was in 3rd or 4th grade, to try and challenge the “very good at math” students, Tara’s teacher told her to start at the back of the book and work backward. As you can imagine this didn’t go very well, and it was quickly abandoned. Tara then went back to memorizing what the teacher did, mimicking it, and getting good grades. It wasn’t until later that Tara realized she could do the math, but she didn’t understand how the math was actually working.

Entering college Tara knew she wanted to major in Elementary Education, but even though she felt like she was good at math she did not originally choose math as her concentration. At one point, a practicing teacher spoke to one of her college classes and talked about how important math is and said “if you can concentrate in math you should.” Since Tara had always been told she was good at math she chose to switch her concentration to math. Her math identity took an unexpected shift.

During these college classes, Tara struggled with math for the first time. She believed that someone good at math was someone who could learn math fast. But in these classes, she could no longer just quickly memorize and mimic. It was during her non-Euclidean Geometry class that she started to see the world in a whole new light. Even though she was struggling with math, Tara held on to the fact that she was “good at math” which gave her the confidence to work hard and figure it out. It was during this time that someone told Tara “It is so interesting that you are struggling. That will help



you be a better teacher because now you see how the kids who struggle feel.” Having to work hard at math during these classes allowed Tara to develop a growth mindset that she has carried with her and used throughout her career.

After college, Tara’s first job was as a sixth-grade classroom teacher. It was while she was teaching her students that Tara realized she didn’t really know what she was talking about when teaching math. When a student didn’t understand, Tara found herself teaching the way she was taught and would just show them again. Then Tara recognized that a group of her students were thinking differently than she was. They were getting the correct answers, so Tara found it exciting to try to understand their thinking. This helped Tara realize that there was more to learning math than the way she learned it.

Later in her career, Tara transitioned into the role of math specialist. She was happy for the opportunity to be able to use what she had learned in college to support students and teachers from kindergarten through sixth grade, but she also quickly realized that she wasn’t done learning about math. She found that she needed to develop a deeper and richer conceptual understanding in order to best support the kids. One way she did this was by spending more time listening to students rather than talking at them. The kids were using strategies and models that Tara had never thought of before, so working to understand these new techniques allowed Tara to better understand the students’ thinking.

Tara’s first interaction with All Learners Network (ALN), at the time known as All Learners Project, was when she was looking for resources on how to best support teachers who were teaching in multi-age classrooms. Her school was getting smaller and smaller, and classrooms started to be combined. She knew that John Tapper, the founder of ALN, had experience working in these kinds of settings and wanted to get his insight. Tara joined a cohort that ALN was offering. It was this group of educators that helped to develop the Work Sort Protocol and other resources that ALN uses to this day!

The small school that Tara worked at eventually closed. So Tara moved to a larger school. While it had its challenges Tara realized that she was good at building relationships with teachers and students in a variety of different settings. Tara liked being able to work on various ideas and approaches with different people and felt like she was making a bigger impact. Once students returned to schools after the pandemic Tara was being asked to take on multiple roles, so she could no longer focus on the math work she enjoyed. So when Sandi Stanhope, Chief Learning Officer at ALN, called asking if Tara would want to join the ALN team to do this full-time Tara felt like it would be a great opportunity and agreed.

As an ALN facilitator, Tara finds it fun to talk about math with teachers and students in many different schools. She knows that not all teachers who are teaching math are



comfortable with math, so she likes to customize her coaching to fit the needs of each specific teacher. Some will need more content knowledge resources while others will need more work on pedagogy. Contracts with each school look different, sometimes the PD includes facilitating workshops, and others will focus solely on coaching, but Tara has seen the most impact made when the contract includes a combination of facilitating workshops about ALN's core content and coaching.

Since starting at ALN Tara has seen so many teachers get really excited when they talk about a strategy or tool, they use it with their class, and it works. One specific example of this was with a fifth grade teacher Tara had worked with. They had talked about and implemented a lot of different instructional techniques, and the next step was to include math games. This was a totally new concept to this teacher. Tara provided this teacher with two fraction games from All Learners Online (ALO), the teacher tried them with her class, and the students loved them. She saw that the kids were having so much fun and were so engaged with the math content. After this the teacher saw the impact that the games had on her students she added games to her math block. Now she and her students try to turn everything into a game. Tara has seen similar things happen when teachers introduce launch or number sense routines in their math blocks. The most rewarding thing for Tara is when she hears of increased student engagement. The goal of ALN's resources is to make them accessible for all students so they all can be engaged.

When you interact with Tara it is clear that she is excited by and finds joy in math. So what is her favorite thing about it? She loves that the same strategies and models can work across different complexities of numbers. When on the surface it is hard to see the similarities between $3\frac{1}{2} \times 2\frac{1}{4}$ and 26×37 , but when you use an area model to solve both problems, it is easier to see the connections between them. These connections can then extend to polynomials and beyond. She believes that if we could bring it back to what people already know about multiplication people would feel so much better about math in general.

As Tara reflects back on her early math experiences she thinks that rather than being told she was "good at math" she should have been told she was "a good mimicker and not a good thinker". Her work now helps teachers to encourage their students to be good thinkers.

What Now? Scan the QR code and scroll to the bottom of the post for links to next steps

1. Check out the blogs Tara has written here!
2. Ready for some of the professional development and rich math community that Tara got to experience? Check out our upcoming events here.
3. Bring All Learners Network (ALN) into your school or district for embedded professional development.

