By: Multiple Contributors
Published: September 27, 2024

As a district administrator or curriculum leader, you are often making decisions about improving math instruction and student outcomes. At All Learners Network (ALN), we know that you need to consider the greatest impact when thinking about outcomes and improvement. There are some key levers to pull that impact both teacher pedagogy and learning. We know that when we improve teacher pedagogy, we improve math instruction and student outcomes.

At ALN, we believe that learning math is a right for students because so much of their future success depends on it. Each of the ALN Five Key Components are critical to improve student outcomes across our whole systems. We are often asked - where do we start? Our response is always to ask questions about district goals and expected areas to grow. Then, we explore the key levers for change and provide some recommendations for implementing the ALN approach in your systems. These key levers are:

- **Pedagogy in the All Learners Lesson Structure** - Pedagogy in a balanced math block that supports inclusion and differentiation.
- **Content Knowledge** - Strong math content knowledge of the grade bands you teach.
- **Intervention Planning** - Designing high quality interventions.

Each of these key levers WILL impact both teacher pedagogy and ultimately student outcomes. We are not looking for a “quick fix” here. Instead, we invest in the implementation of high leverage practices that build capacity of the teachers already in your systems. These three levers have a high impact on student achievement - but, we

can't change practice in each area at the same time. As a district leadership team, you need to investigate and uncover which lever to pull that will make change in your system in both long and short term growth. When working with ALN, we want to investigate this decision WITH your system with YOUR commitment - this is a partnership! It is our commitment to growth in belief system and skill set that ultimately drives systems change.

We should not be implementing change without considering the expected impact and potential outcomes. Once you determine which lever to pull, systems change implementation should follow the following reflective sequence on a yearly basis. This is where ALN's rapid cycle of inquiry impacts systems change - is what we are doing actually working for kids and teachers?

We recommend these critical questions as you reflect on your implementation over the course of the year:

1. What are you looking to improve in the next year? Next 5 years?
2. How will you provide professional development for teachers? What does their learning environment look like? How will you provide ongoing support and feedback?
3. How will you know when you've made progress toward your goal?
4. What evidence of growth is observable? Did you meet the goal? Are you ready for the next goal?

Ultimately, as we improve our practice in one lever, we will see an impact in the decisions we make regarding the other levers. This is not linear growth, but rather a system of puzzle pieces shifting closer together to meet the variability of our students' learning needs, promoting meaningful equity and inclusion in math class for ALL. Inclusive math teaching and learning includes an emphasis on high quality pedagogy through universal instruction, a system for intervention (using ALN's High Leverage Concepts Resources), high quality student facing resources, strong math content knowledge and using formative assessment to drive instructional decisions in a rapid cycle of inquiry.

We can pull on multiple levers to impact change, but if we pull all of them at the same time, we are unlikely to actually build belief and support for this change or worse, perpetuate negative perceptions of math instruction in our schools. No matter where you start, the end goal for each of these key levers is usually the same. More math for more students. We believe that all students can learn math and all students deserve rich and meaningful math instruction. By focusing on pedagogy, designing intervention and math content knowledge, we promote meaningful inclusion and access to high quality math learning for all students.

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

1. Review National Council of Teachers of Mathematics (NCTM)'s list of Principles, Standards, and Expectations, designed to help educators with this decision making.
2. Watch the recording of our July 2024 workshop, Supporting Math Instruction: ALN Working with Systems.
3. Bring All Learners Network (ALN) into your school or district for embedded professional development.