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Pulling from their math coach backgrounds, All Learners Network's Chief Financial Officer, Chris Farnham, and Director of Operations, Ashley Marlow, outline some of the critical things for math coaches to focus on in their planning for next year.

When it gets to the end of the school year, math coaches, math teacher leaders, and instructional leaders are reflecting on the current school year while designing their upcoming professional development plan. This is a time when barriers in our systems are illuminated, including schedules, resources, and competing priorities. Simultaneously, this is the time when many schools and districts realize the value of math specialists or coaches as a professional resource to improve both the teaching and learning of math.

Math coaches have a skill set that is a mix of strong math content knowledge, pedagogical content knowledge, and leadership experience that allows them to provide instructional feedback, support with planning and coteaching, and act as a driver towards improving student outcomes for all students. Coaches are able to provide one-on-one training and support, as well as small and large-group professional learning opportunities (Sweeney & Harris, 2017). Coaches within a school or district have the benefit of being a part of all professional learning in the school, enabling them to assist teachers in the implementation of new learning that takes place during inservice and faculty meetings as they model lessons, co-plan, co-teach, and provide “just in time” feedback for teachers. Research suggests mathematics coaching can improve teacher instructional practice as well as improve student achievement in math (NCTM, 2015).

At All Learners Network (ALN), we know that coaches can benefit school systems,



especially at a time when competing priorities and staggering educational inequities are spearheading national conversations in education. So, how do we set our math coaches up for the greatest success in impacting teaching and learning in our schools?

1. Math coaching should prioritize two critical components of effective teaching practice: interpreting and using data and improving Tier 1 pedagogy.
 - **Interpreting and Using Data:** Math coaches should focus on looking at data - they must be experts at using data to understand students' understanding. They must support the teachers they are working with to identify strengths and next steps based on strategy use and models within student work.
 - Use tools and resources (HLCs) to support them
 - Focus on formative assessment and student work
 - Use the Work Sort Protocol to facilitate professional conversations about data
 - **Improving Tier 1 Instruction:** Math Coaches work to continue implementation of the All Learners Lesson Structure (Launch, Main Lesson, Math Menu, Closure) throughout the school/district making math class accessible for all students.
 - Use the ALN "Look Fors" when modeling, observing, and/or providing feedback on instructional strategies during the balanced math block
2. Math coaches require strong leadership knowledge and skills that allow them to build and maintain trusting relationships with teachers and students. Math coaches must help teachers to see their role as a non-evaluative extension of their professional learning. Their practice needs to explicitly connect to larger school and district goals so the teachers working with them see and experience the impact on both their teaching, their students, and the school system.
3. Due to the complexity of their roles, math coaches need to create an organizational system. They need to consider the quantity of teachers they are working with, prioritizing folks who have identified interest in coaching to build those initial trusting relationships. They will need to plan who they will meet with, how often they will meet with folks, and what the focus of their time together will be.
 - Investigate coaching opportunities like lesson study, model lessons, co-planning, or data discussions

Brene Brown reminds us that a leader is someone who takes responsibility for finding the potential in people. That leader then processes that potential and provides support and encouragement in order to develop that potential (Brown, 2018). Math coaches are an essential part of professional learning systems that result in a high impact on both teacher learning and student outcomes. These trusted partners have a vision for the professional development in the school/district and ensure classroom teachers, interventionists and special educators receive the day-to-day professional learning support they need in order to make changes to their practice.



Critical questions to consider as you design your coaching plan:

- What is the larger district vision for systemic change?
 - What is the focus for next year? Year 2? Beyond?
- What professional learning does **everyone** need to take part in?
- What professional learning do some people need (more specific demographics need for coaching support)?
- How will you decide who to include in your coaching cycles? When?
- How will you maintain your coaching schedule? The integrity of your system?
- How will you hold yourself accountable? What support do you need to be most effective in your role?

Resources

Brown, B. (2018). Dare to Lead: Brave Work. Tough Conversations. Whole Hearts.

Sweeney, D., & Harris, L. (2017). Student-centered coaching: The moves.

The National Council of Teachers of Mathematics (2015). The Impact of Mathematics Coaching on Teachers and Students www.nctm.org.

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



1. Read our blog on What is Math Coaching? What is Not Math Coaching?
2. Check out more on our Evidence Based Practices.
3. Bring All Learners Network (ALN) into your school or district for embedded professional development.

