# Provider and LEA Executive Sponsor Interviews & Coach Listening Sessions Report

July 2023

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# Executive Summary

## Overview

The National Implementation Research Network (NIRN), as part of the Effective Implementation Cohort (EIC) investment funded by the Bill and Melinda Gates Foundation, conducted qualitative research to understand the capacity of Providers and districts to support effective implementation of high-quality math curriculum. Specifically, the EIC team conducted semi-structured interviews and listening sessions with Providers, Executive Sponsors, and district staff providing instructional coaching. All interviews asked about implementation strategies and supports; communication; data use to support implementation; and factors that maximize or impede successful implementation. Provider and Executive Sponsor interviews also included questions regarding implementation planning, fit and feasibility, sustainability, and team functioning. Methods, key insights, and results from the interviews are summarized below.

## Methods

In February, March, and April 2023, NIRN Implementation Specialists conducted a total of 13 Provider interviews across 11 Provider organizations with a total of 19 participants; 14 Executive Sponsor interviews across 14 school districts with a total of 15 participants; and 20 coaching listening sessions across 19 school districts with a total of 35 participants. Demographics for the Provider, Executive Sponsor, and Coach participants can be found in Appendix A. The Provider, Executive Sponsor, and Coaching Listening Session semi-structured interview protocols developed by the EIC team consisted of 13 questions, 13 questions, and 11 questions, respectively (See Appendices B, C, and D). Each interview lasted 45-60 minutes, on average. NIRN Implementation Specialists audio-recorded the interviews and took notes as interviewees spoke. The qualitative analysis team used Rev.com to transcribe interviews.

After reading three initial transcripts, the qualitative analysis team met to determine themes that directly address the Learning Questions and constructs of interest, and to develop a codebook for all groups (Provider, Executive Sponsor, and Coach). Two data team members conducted a thematic analysis of interviews using NVivo software to code data. One analyst coded the Executive Sponsor and Coach interviews, while the other analyst coded the Provider interviews. After coding these initial interviews, the qualitative analysis team met to add new sub-themes to the codebook. Results were reviewed by a senior researcher for consistency and interpretation.

## Key Findings

- Executive Sponsors were very positive when discussing their **relationships** with their district Providers, describing them as collaborative, easy to work with, knowledgeable, and experienced. Providers noted both successes and challenges in their relationships with Executive Sponsors, with most emphasizing the importance of having open and frequent bidirectional

communication. Executive Sponsors' heavy workload and frequent role shifts were identified as barriers to this partnership. <u>Coaches</u> highlighted the need to build relationships with the individuals they coach prior to engaging them in further implementation work. Coaches recognized the need to develop safe spaces and personal relationships with those they were coaching, noting that their role was different from that of an administrator. Active listening and reflective questioning, planning lessons, and conducting non-evaluative walk-throughs to assess their skill level with the curriculum and instructional techniques, were all identified as strategies for building relationships with teachers.

- **Communication roles and successes** were discussed by all three groups of interviewees. <u>Executive Sponsors</u> reported often taking the lead communication role, with Providers and Coaches supporting these efforts. When communicating with principals and teachers, messages consistently emphasized the value of this program, underscored Executive Sponsors' commitment to the program, and recognized principals and teachers for their efforts and hard work. In discussing communication roles, <u>Providers</u> highlighted the importance of ensuring District Team members understood their role and the ways in which they needed to craft messages for their various critical perspective groups. <u>Coaches</u> noted that internal communication among their teams was strong. Coaches worked to support bi-directional communication with teachers and others by developing supportive relationships and respecting them as professionals. Coaches frequently served as communication mediators between Providers and teachers because of their connection to both.

- Multiple <u>Executive Sponsors and Providers</u> expressed **challenges with communicating** with parents about the program and its impacts, often relying upon principals and teachers to share directly with parents. Additional challenges noted by <u>Providers</u> were the need for District Teams to communicate more effectively and efficiently among themselves; difficulties meeting with school leadership; and the need to be intentional, consistent, timely, and compelling when communicating with critical perspective groups around the importance of the EIC work. According to <u>Coaches</u>, communication within the district was made more challenging when there was lack of engagement by district personnel/principals, competing messages and priorities, and/or bureaucratic red tape.

- <u>Executive Sponsors, Providers, and Coaches</u> served as **champions for implementation**, **providing diverse types of supports** to each other, District Teams, and teachers. <u>Executive Sponsors</u> facilitated implementation by being visible leaders of the work and engaging in thoughtful conversations and data reviews across levels (Central Office, schools, etc.) and roles (Superintendent, principals, teachers, etc.). <u>Providers</u> worked with Executive Sponsors and Coaches to plan for implementation with an eye toward sustainability, organize District Teams, and analyze data (e.g., to identify needs, plan actions, and determine progress toward goals). Executive Sponsors noted that Providers championed implementation most frequently by helping to guide the work as "partners," asking questions, and working directly with those tasked to lead implementation. Providers also offered professional development, coaching, and data analysis to districts, often filling needs or addressing areas where districts lacked capacity. Finally, Providers championed implementation by directly working with Coaches through leading classroom walk-throughs and professional learning opportunities, as well as by crafting thoughtful communications about the program to critical perspective groups. <u>Coaches</u> served in similar roles, with their most direct role being supporting teachers' understanding and implementation of the curriculum. All Coaches used a multi-strategy approach, often cyclical in

nature, to support teacher content understanding (e.g., of the curriculum, of math knowledge generally) and pedagogical understanding (how to teach the content and curriculum). Strategies utilized included planning with teachers, providing professional development to teachers, observing them as part of walk-throughs (and having other teachers participate in the walk-through), reviewing student work products, and assessing data findings. Coaches emphasized the need to provide timely and non-threatening feedback. Most Coaches also reported supporting administrators' understanding of grant efforts, including of the curriculum and teaching strategies, as well as expected impacts. Walk-throughs and teacher observations were two of the strategies used to communicate grant efforts and expectations with administrators.

- In addition to providing supports, Executive Sponsors and Coaches identified ways they **received supports** to execute on their EIC work. Executive Sponsors reported receiving multiple supports from Providers around organizing District Teams, planning, implementation, and data analysis. They described Providers as responsive when working with their district and staff. Coaches noted receiving supports from a variety of people and organizations, including Districts (e.g., to assist with communication, collaboration, and problem-solving) and Curriculum Developers (e.g., to discuss coaching strategies, data findings, etc.). Additional supports were requested by the Coaches, including opportunities for professional development around coaching practices; access to resources or training to support their understanding of the specific curriculum; and assistance with efforts to increase administrator and district engagement (i.e., to ensure district- and building-level administrators were knowledgeable of the process and goals, invested in the work, and supportive of Coaches' efforts).

- Providers, Executive Sponsors, and Coaches identified multiple **implementation facilitators**, including districts' commitment to equity; availability of resources to increase staffing and expertise; administrator involvement and commitment to the work; consistent messaging that clarifies expectations, sets the tone for the work, and increases buy-in; building positive relationships with staff; celebrating impacts and/or highlighting the work; and providing non-threatening opportunities and time for teachers to deepen their content knowledge and understanding of the curriculum. Coaches also pointed to the benefits of teachers learning together (e.g., walk-throughs), as a way to share successes and take risks.

- Across the three groups, identified **implementation barriers** included lack of buy-in and accountability by principals with respect to teachers' commitments to the work; teachers' mindsets regarding students' abilities and/or the teacher's own desire to adopt a new curriculum; turnover among teachers and leaders (e.g., principals, Central Office administrators); and time for teacher professional development and practice. A major barrier identified by Coaches that negatively affects implementation was lack of time – for them to coach teachers, for teachers to learn and practice the curriculum, and then for students to engage in learning via "productive struggle." Coaches also identified teacher turnover as a significant challenge, resulting in Coaches having to tailor their strategies based on teacher seniority level (i.e., basic training for newly hired teachers, continuing to advance veteran teachers with curriculum implementation) and, less often, teachers' lack of content knowledge resulting in lack of fidelity to the curriculum. Anticipated barriers include some of the current ones – lack of buy-in and turnover – as well as dwindling support if districts or parents question the return on investment of the program.

- **Assessing and ensuring fit** of the selected curriculum was attended to by Executive Sponsors and Providers. <u>Executive Sponsors</u> reported utilizing data gathered via observations, walk-throughs, surveys, and assessments to assess fit, which they defined as teachers' abilities and readiness to teach the curriculum. To assess and ensure fit, <u>Providers</u> mentioned several strategies including: offering professional development (to increase learning around integrity indicators used in classroom walk-throughs); working with teachers to provide opportunities for students to "do the math and be the mathematicians"; collecting, analyzing, and using data (e.g., use of the Leading Educator School Conditions tool); encouraging district, administrator, and teacher buy-in; and promoting alignment of the EIC work within existing district priorities. In terms of **feasibility**, <u>Executive Sponsors</u> reported working with District Teams and teachers to ensure sufficient allocated time for teaching the curriculum and receiving other supports needed for successful implementation, such as professional development, coaching, etc. Likewise, <u>Providers</u> supported District Teams in ensuring feasibility of the curriculum by assisting with appropriately pacing the curriculum implementation and with gathering data from multiple sources to identify needs and assess progress toward goals.

- It is clear from comments that <u>Executive Sponsors</u> and <u>Providers</u> have given some thought to **sustaining grant efforts** and impacts moving forward. One strategy to ensure sustainability was identifying key people, roles, and responsibilities within the grant and developing structures and processes for retaining these resources beyond the grant funding period. For instance, Executive Sponsors noted that their districts were attempting to continue funding to support positions such as Coaches, math specialists, etc. Many <u>Executive Sponsors</u> also noted that they had learned from Providers how to utilize people more effectively in their roles and planned to continue doing so after the grant ended. In many cases, district personnel were also taking on or co-sharing responsibilities as a step towards being able to do this work independently. Some Executive Sponsors were hopeful that administrators and/or teachers would sustain this work after recognizing the positive impacts on student learning. <u>Providers'</u> supports for sustainability were designed to increase engagement of districts in long-term planning, build staff expertise in areas such as coaching and data analysis, and develop valued collaborations.

- <u>Providers</u> emphasized the **importance of data** in implementation work and regularly met with Executive Sponsors, District Teams, and Coaches to review data and discuss findings. All groups noted that they had access to multiple types of data (e.g., observational data, survey data, assessments scores, etc.) from multiple sources (e.g., principals, teachers, students, etc.); tended to triangulate data for interpretation; made use of the data for a multitude of purposes (e.g., to understand program impact on students, to assess fidelity to the curriculum); and were cognizant of the need to tailor messages when sharing results based on the target audience. Of particular utility were data that were actionable; aligned with the questions of interest; perceived as reliable and valid; and easily accessed, digested, and understood. Interviewees also requested additional opportunities to conduct in-depth analyses and expand on the intentional use of data (e.g.,, to achieve implementation goals); develop timely, cohesive, and meaningful data stories; revisit alignment of data with their purposes; and address some of the data feasibility challenges (e.g., conducting observations remotely, students' fatigue around testing, diversity of school data cultures leading to data credibility issues, and lack of time to analyze and triangulate data).

For each set of interviews, the key insights are presented followed by detailed discussion of the themes and subthemes that cut across each of the interviews (Providers, Executive Sponsors, and Coaches). Illustrative quotes are provided as examples for each theme.

# Provider Interview Results

## Key Insights

- ***Among Providers who noted positive relationships with Executive Sponsors, most emphasized the importance of having open and frequent bi-directional communication and a sense of community.*** Relational challenges noted by Providers were mostly due to Executive Sponsors' heavy workloads and shifting roles.

- ***Positive relationships between Providers and District Teams were described as partnerships based on mutual trust.*** Recommendations for strengthening relationships between Providers and District Teams included investing in key critical perspectives, increasing meeting attendance, and involving school leadership in program implementation work.

- ***Providers emphasized the importance of the EIC convening in strengthening their relationships with both Executive Sponsors and the District Teams.*** The EIC convening in San Diego allowed implementation teams to meet and collaborate in-person, which strengthened relationships. Providers and District Teams who met at the convening reported more frequent communications as a result.

- ***Providers highlighted the importance of ensuring every implementation team member understands their role and the different ways in which they need to craft messages to share with their different critical perspective groups, particularly families.*** Communication challenges included restrictions in meeting with families in-person and low completion rates to family surveys. Providers noted differences in engagement, with higher engagement in EIC work among white families.

- ***Providers offered solutions to promote sustainability,*** including focusing on long-term planning and ensuring that districts continued implementation work beyond the initial grant period***.***

- ***Many implementation teams adjusted the original implementation plan or informally made changes to implementation strategies to address various contexts. Implementation facilitators*** included access to Coaches, involving students in program planning, being intentional in who was invited to participate in decision-making, and gaining leadership buy-in around grant activities. Providers identified lack of accountability by school leadership to ensure implementation of the curriculum and misperceptions among teachers and administrators of students' abilities as ***implementation barriers***.

- Providers shared the processes and metrics used by implementation teams to ***assess and ensure the fit and feasibility of the curriculum,*** such as leading professional development activities around curriculum design and pacing; using data; and working with districts, administrators, and teachers to enhance buy-in and promote the program within other existing district priorities.

- ***In regard to data use, Providers identified data collection methods, such as observations, surveys, and capacity assessments, as producing the most useful findings.*** Providers wished they had more data from observations and student work. Most Providers created or continued to use data dashboards to improve data accessibility and guide conversations around data with District Teams.

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# District Teaming and Championing

## Provider Relationships with Executive Sponsors

**Providers noted effective and positive relationships with Executive Sponsors, as well as opportunities for improvement, such as identifying and communicating with Executive Sponsors.** Those who emphasized positive relationships highlighted the EIC convening as an effective strategy to strengthen their relationship with Executive Sponsors. Other notable characteristics and facilitators of positive relationships were frequency of communication, as well as a sense of partnership and community.

> *"I feel now like they're my family. We talk a lot. We do our weekly meetings, but we also talk through text message, email, sometimes daily with whatever is going on. It's been a really good push with their change."*

Providers also shared the ways in which they supported Executive Sponsors and the District Teams in championing implementation, such as providing them with new language and ways to think about implementation, as well as convening key critical perspectives to lead implementation work.

**Efforts for improving relationships between Providers and Executive Sponsors included identifying more effective ways to communicate and clarifying the Executive Sponsor role.** Executive Sponsors' overwhelming number of responsibilities made it difficult for them to dedicate sufficient time to communicating with Providers. Providers used this challenge as an opportunity to show flexibility, which they demonstrated by offering to reschedule meetings or to meet at times that better worked for Executive Sponsors.

> *"One of the challenges with [Executive Sponsors] is that their other responsibilities, besides the grant work, are overwhelming. So, their bandwidth, their capacity to stay tuned to the regular work of the grant, it's tough for them. Their plates are overstuffed with actual stuff that families are expecting, stuff that their bosses are expecting, stuff that... It's just this non-stop barrage of tasks."*

**Some Providers could not identify which District Team member served in the Executive Sponsor role, due to bureaucracy at the executive level that impacted decision-making.** As a result, Executive

Sponsors' leadership skills and influence varied among districts, leading some Providers to suggest to District Teams that they fill the Executive Sponsor role with someone with greater decision-making power.

## Provider Relationships with District Teams

Providers shared strengths and areas of improvement for relationships with District Teams. **Positive relationships between Providers and District Teams were described as partnerships based on mutual trust.** Recommendations for strengthening relationships between Providers and District Teams included investing in key critical perspectives, increasing meeting attendance, and involving school leadership in program implementation work.

**Providers emphasized the importance of building partnerships with District Teams.** For example, Providers reported working collaboratively with District Teams to achieve a common goal rather than serving in an authoritative expert role. To do this, Providers used strategies such as demonstrating the value of the EIC project, reinforcing the importance of District Teams' input into the work, and presenting the teams with opportunities to name their priorities and offer input. Maintaining this type of partnership required building trust with teachers. Teachers were excited to engage in professional development when Providers explained the value of math-specific training. Teachers appreciated having input in the direction of implementation work and recognized Providers as trusted partners.

> *"We've cultivated the relationship over time by giving them space to kind of name what their priorities are and give input into the work that we're doing. And I think by giving them space to do that, the trust that they have in us at this point in the year is really strong."*

Additionally, **the EIC convening served to strengthen Provider and District Team relationships by kickstarting regular communications around implementation support.**

> *"I put a lot of pressure on [Executive Sponsor] to invite [Coach] to the convening. And that once we had already had that relationship, and she had a few ahas in that one in-person conversation about the usefulness of the teacher guide, and then coming to the convening, it just sort of unlocked her, it lit her fire, let's just say that, and she's just been on fire ever since."*

**To strengthen relationships, Providers recommended supporting districts by bringing in and investing in key critical perspectives.** Providers ensured that District Teams included broader representation from schools by inviting principals, Coaches, superintendents, and program directors to join. Providers also suggested that District Teams select team members with credibility within the community.

In addition to broadening and strengthening key critical perspective representation, **Providers highlighted the need to increase meeting attendance and involve school leadership in implementation work.** Suggested strategies to address meeting attendance were building a sense of urgency, aligning with existing district structures, and encouraging Executive Sponsors to reach out to invited participants

and lead meetings. **Providers noted improved meeting attendance when Executive Sponsors were involved. Careful planning of school leadership participation also resulted in willingness of leadership to get involved in implementation work.**

> *"It is successful when there is a very clear purpose and that there is a need for all of the stakeholders… to be participating in the conversation. Those meetings tend to be the ones that are the most well attended and where people leave the meetings saying positive things about the experience."*

> *"With school leaders, it's been very slow moving in the sense that we've been asked to be very careful and mindful of what we put in front of them and what we ask of them. But what we've found is that every time we put more in front of them or we ask more of them, they're very willing and interested."*

# Communication

Providers discussed the successes and challenges in communicating with different critical perspective groups (e.g., school or district staff, families, and communities).

## Successes

**Providers offered support with communication design, development, and flow, while assisting District Teams in identifying the appropriate audience for communications.** Providers held listening sessions with school leaders to learn about teachers' needs related to communication. Some Providers shared drafts of communications to garner feedback from District Teams. Newsletters and quarterly updates were also used by Providers to communicate with District Teams. Providers often drafted communication for math specialists to share with caregivers, teachers, coaches, and leaders.

In discussing communication roles, **Providers highlighted the importance of ensuring every implementation team member understood their role and the different ways in which they needed to craft messages depending on target audience, particularly families.**

> *"Each stakeholder that's on the district implementation has a specific role and why they're on the team. For example, we have a director of exceptional children, and so thinking about how they message to their stakeholders may be different than the messaging that a principal supervisor that's on the DIT does. Just making sure they understand their role and what they need to communicate in a timely manner is something that we definitely need to work on."*

> *"Communication is an area of growth overall because how do they communicate to families and whose responsibility is it to communicate with families? Because the dynamic of a district within DOE has its own very specific dynamic, so there have been ongoing questions about whose role is it to communicate with families and then what is the communication to families."*

**Providers noted success in partnering with the "right people" to ensure effective communication.** For

example, Providers mentioned that having direct communication channels with Coaches was critical to their ability to have an impact.

## Challenges

Providers noted challenges around communicating with families, school leadership, and District Teams.

**Many Providers expressed challenges with communicating with families about the program. Communication challenges included restrictions in meeting with families in-person and limited responses to family surveys.** One family survey caused confusion among families and resulted in families calling teachers and leaders for help.

Providers recognized the difficulty in getting families on campus for continuing education and reflected on potential strategies to assist districts with this challenge. **Providers commented on the differences in engagement across families, perceiving higher engagement among white families.**

> *"We are just not reaching the right caregiver groups. We don't have high engagement across caregiver opportunities in general. And then also there's an over-representation of white folks who have students who are in honors tracks."*

**Providers also expressed challenges around meeting with school leadership,** resulting from ineffective systems of communication with principals and other leaders and getting those groups to prioritize meeting with Providers. **Providers emphasized the need for intentional, consistent, timely, and compelling communication among District Teams and critical perspectives around the importance of the EIC work.** Providers supported District Teams in communicating the EIC work in a way that was motivating and relevant to their target audience.

**Providers emphasized the need for District Teams to communicate more effectively and efficiently amongst themselves in moving the implementation work forward.** Providers wanted to get better at providing consistent communication within and across districts.

> *"The way communication is received from the district and the volume of things that they're telling people to do and the lack of relative prioritization has made it challenging for us as a support organization to also navigate the space within things."*

**Providers shared that they face restrictions in communicating with various critical perspective groups due to leadership shifts and bureaucracy within schools.** Some Providers were not allowed to communicate with those outside of District Teams because Executive Sponsors wanted ownership of the work. For example, one Executive Sponsor wanted every email from the Provider to the District Team to go through them, which resulted in a communication bottleneck.

# Sustainability

Providers shared how they and the District Teams planned or continued supporting implementation beyond the grant period. Providers discussed both solutions to promote sustainability as well as associated challenges.

**Providers noted that planning implementation activities beyond the grant period, and developing**

**lasting collaborations were ways to support sustainability.** Providers emphasized that they valued partnering with District Teams and encouraged them to own the work to ensure sustainability.

> *"We're truly a partnership in the work. Anytime we do professional learning or even our district implementation team, I make sure that I'm not the one that is always the voice. I make sure it's a true partnership and collaboration of who's sharing information to be able to make sure that when this grant is done, they can continue the work and it doesn't stop because I'm not there."*

**Providers identified having an unclear vision as an anticipated barrier in ensuring sustainability.** Some Providers were not able to articulate the district leaders' vision for the next implementation phase, which negatively affected Providers' abilities to tailor support around sustainability.

> *"We're bringing something from the outside and they're kind of playing because it's a grant and whatever, but there isn't yet a sense that it's a real use or that there's a need for them to do this if we were to up and leave."*

# Implementation

## Support Provided

**Providers noted the ways in which they partner with District Teams to support successful implementation, such as offering communication, data, and professional learning support.** In regard to **communication support**, some Providers sent articles and daily emails to ensure that District Teams had an understanding of Providers' work and professional development activities within schools. Additionally, Providers crafted thoughtful communications about the program to critical perspective groups. One Provider often posted on Twitter to get people excited about the work, and they encouraged District Teams to do the same. Providers also prepared, collaborated, and monitored ongoing communication to extend to critical perspective groups.

**Providers supported Executive Sponsors and District Teams through coaching around data collection, sharing, and use.** For example, Providers facilitated discussions around quality data sources, needs, and uses with District Teams during implementation team and weekly Executive Sponsor meetings. Providers also assisted Executive Sponsors with the development of data decks every quarter to share with leadership, sent consistent data memos, and held quarterly conversations around recent walkthroughs and coaching log data.

> *"We've tried to help them use data more effectively to make decisions and make adjustments and served to be someone who documents and tries to help them move forward with the action steps that they're naming."*

**Providers also met with Executive Sponsors to strategize for instructional coach meetings based on the data collected.**

> *"The support that we've given those teacher leaders, in terms of content development, pedagogy, confidence in their ability to lead, the opportunity to lead sessions, has really been fruitful."*

**Providers also worked with Coaches by leading classroom walkthroughs and professional learning,** troubleshooting problems, brainstorming, and co-designing professional learning. Providers leveraged professional learning to support District Teams and share the importance of implementation tools, such as progress monitoring and improvement cycles.

## Implementation Planning

**Providers discussed how the implementation team uses the implementation plan to move forward with program goals.** District Teams relied on the plan to lead discussions and keep the implementation goals on track. Some plans were incorporated into data dashboards for easier reference to individual areas of the plan.

> *"Regardless of the strength of the plan, that them [District Team] proclaiming and sharing a math plan, and referencing that plan is increasing the likelihood that they're going to, as they define it, stick to their implementation."*

**Many District Teams adjusted the original implementation plan or informally made changes to implementation strategies.** One team had an initial structure that would not be feasible for the district based on scheduling and timing, so Providers adjusted the structure to accommodate District Teams and ensure a replicable and sustainable implementation process. Some plans worked well for the first implementation year, but Providers recognized the need to change the professional learning plans in the second year to introduce District Teams to new concepts they had not already learned. Frequently, Providers and District Teams used data to inform the implementation plan.

> *"The best laid plans need adjusting constantly."*

## Implementation – Facilitators

**Providers identified multiple implementation facilitators, such as involving students in program planning, being intentional in who they invited to participate in decision-making, and gaining leadership buy-in around grant activities.**

**Having grant-specific Coaches on the District Team improved overall District Team implementation content knowledge and management.**

> *"Having a leadership that can sort of weather the bumps that you're going to go through in any kind of a change process or any kind of innovation. But have confidence that what they're doing is still going to lead to the best outcomes. And take those bumps, adapt, provide the resources needed, provide the supports needed and move forward, instead of just bouncing around."*

Additionally, **Providers recognized the importance of authentically involving more students in program planning and implementation,** such as encouraging students to make decisions about their educational trajectories.

Providers discussed how they navigated District Team member recruitment and district-wide decision-making. When recruiting members to the District Team, **Providers were intentional in who they invited**

**to participate in decision-making.** Providers added more local people to the implementation team to ensure every voice within the district was represented and to better understand the culture of the district. Providers also recognized the importance of collaborating with key partners within school districts and setting clear role expectations.

> *"Getting the right people on the team has made a really big difference, but also making sure that they understand their role and the work that they do to support the schools has changed the conversation dramatically, especially in the last couple of months of just what they need to do to push the work forward at the schools."*

**Providers identified the importance of gaining leadership buy-in around the curriculum and grant activities to facilitate decision-making.** They noted that leaders need to be made aware and be involved in implementing curriculum changes to make definitive decisions about what Providers can do to support math teachers.

> *"We need the right players at the table sometimes for some of the things we're getting approval for."*

## Implementation – Barriers

**Providers identified the following as implementation barriers: lack of accountability by principals with respect to supporting math curriculum implementation and getting systems in place at each school to ensure fidelity of the curriculum.**

> *"Getting systems in place at each of the individual locations that have accountability. Because one of the things is... In one of our buildings, we've got teachers who are two units behind. But then in another building, we've got people who are a unit ahead, which can be a function of time difference on the amount of time spent on math a day."*

**Providers also identified lack of buy-in and action from administrators around the implementation of the math curriculum as another barrier to implementation.**

> *"They're [administrators] bending themselves over backwards to make sure teachers are available for it, lay that out there, but then they're not necessarily there for it themselves."*

**Last, misperceptions among teachers and administrators around equity within teaching practices and student capabilities were considered by Providers as barriers.** For example, some administrators did not consider equity in supporting different needs among students or teachers. Additionally, Providers stated that some teachers have lower expectations regarding the abilities of students who are English language learners.

# Fit and Feasibility

Providers shared insights into the processes and metrics District Teams used to assess the fit and feasibility of the curriculum, such as leading professional development activities around curriculum

design and using tools to assess fit and feasibility. Providers also discussed challenges and associated strategies in supporting teams to ensure feasibility of the curriculum.

**Providers encouraged District Teams to put processes in place to ensure the fit of the curriculum.** For instance, Providers led professional learning around integrity indicators used in classroom walkthroughs to ensure District Teams understand curriculum design. Providers also worked with teachers to select high-level tasks from the curriculum where students could "do the math and be the mathematicians." Providers also made some accommodations with districts to build fit within existing district priorities.

Among some of the tools that were helpful to assess fit and feasibility were tools to assess school conditions**.** These tools were used internally by Providers to determine conditions in place within schools that supported optimal implementation of school-based professional learning led by a teacher to their peers.

> *"The conditions that we've always prioritized within that tool have been, do they have time? Meaning both time with their sixth or eighth grade teacher group, and also as the person leading the PD, do they have the release time to observe their peers, to attend PD with leading educators, to attend coaching sessions with our Coaches… to debrief, to keep their principal in the loop. Time is always a big one."*

**In terms of feasibility, many Providers identified challenges such as time and pacing of the lessons.** For example, some teachers did not want to move through a lesson if students had not fully grasped or understood the first activity or warmup. Providers shared solutions to respond to this challenge, such as showing teachers how to pace the lesson.

> *"Pacing, being comfortable moving even though half the students, or most of the students are still a little unclear. That's been the biggest kind of hurdle for feasibility. And there's lots of ways to work through that, like modeling, demo teaching, co-teaching, just showing how it's done has been the most effective."*

**Providers also shared strategies they used to support District Teams in ensuring the feasibility of the curriculum, such as helping teams connect the grant work to other district initiatives. One strategy was to gather data from multiple sources.** For instance, Providers conducted classroom observations multiple times a year to examine broader system impacts. They also gathered feedback from individual coaching sessions with teachers and conducted inquiry cycles around problems of practice.

> *"The push behind having a common walk-through form across the district around feasibility is that they're collecting data and sharing it back with us in a way that responds to what does current teacher practice look like collectively so that we can support them with building the tools at the school and district level."*

## Data

Providers were asked about the use of data to support implementation, such as the types of data they found most helpful or useful, what available data they did not use or find helpful, and what data they wished they had. Providers also shared how they collected and shared data with District Teams, and what they found feasible and challenging in data collection and sharing.

## Data Quality and Utility

**Providers emphasized the importance of data in implementation work and explained the ways they partner with District Teams in using data.** Providers used data constantly to inform implementation decisions, integrating this into their work as part of a process versus viewing it as a separate activity.

> *"Data is extremely important in this work, not only for us as a partner, but the [school] team has a really strong research and data department, and we bring together our data from the work, but also their district data."*

**Providers found data collection methods that produce easily understood data as the most useful, such as observations, surveys, and capacity assessments.** Survey results summaries that included highlights, headlines, and asset-based statements were particularly appealing to District Teams, making them more likely to dig deeper into the data. Observations and District Capacity Assessments were also mentioned as helpful in sparking conversations at the district level.

> *"Our observations are the most helpful. We learn a lot by going to those sessions, experiencing them, and going through the process of what is the highest impacting issue so that we can then create what are high yield strategies. It's always the observations that are the strongest ones."*

**Providers reported how they and their District Teams used data to prioritize goals.** This year in particular, Providers improved in setting and meeting effective implementation goals due to collecting large quantities of data in the first year of implementation. District teams used scores from district capacity data to champion implementation work and focus more on building sustainability.

**Some Providers shared that some data assessment strategies and practices were limited in their usefulness.** They mentioned MAP data and tracking downstream measures (e.g., student outcomes, student health data, student work samples). Student work samples were also viewed as limited in their usefulness because they are not collected with fidelity, limiting generalizability.

## Data Needs

**Other Providers wished they had more reliable and valid data from observations and student work and wanted District Teams to be more systematic in collecting and using observation data.** Providers believe that this data will allow them to better identify specific needs and adjust accordingly. **Unfortunately,** Providers experience challenges conducting observations frequently as most of them work remotely and are not embedded in schools where they can easily conduct observations.

**Providers also wished they had more student work as they view them as reliable evidence of student outcomes and implementation progress.** For example, collecting data such as end-of-unit assessments, "check your readiness," and "cool downs" would have provided more robust assessments of student learning and understanding than some assessments. A challenge in collecting such data included some teachers' lack of willingness to share their students' work.

> *"With student work especially, I want to measure progress. And so right now we collect it twice per year. I know that the Coaches do more on site, but from my*

*perspective as the program manager, I want to see more, like what did it look like in the beginning and what does it look like now so that we can really speak to the impact of our work."*

## Data Collection and Sharing

Providers collected data through a variety of methods, such as focus groups, surveys, student work, pre- and post-professional learning surveys, classroom walkthroughs, and observations. Providers then shared these data with District Teams.

**Providers reported using data to engage in shared learning with District Teams.** For example, Providers and District Teams co-examined data they collected and shared their input, reflections, and needs. They also engaged in professional learning together based on data collected at schools.

**Most Providers created or continued to use data dashboards to improve data accessibility and guide conversations with District Teams.** Some Providers created multiple dashboards this year, such as one for District Teams to access data and another for internal Provider use to examine performance across schools.

> *"Any data that we collect, even within the district, so the district person that's on the team for the data department, they add to this one-stop shop as well to make sure that we're able to have these conversations but we make sure that during the sponsor driver meeting, anytime a new data source is available, we talk about it during our sponsor driver meeting, and then we lift it up in our next district implementation team and then put it in our data resource bank."*

# Executive Sponsor Interview Results

## Key Insights

- ***Positive relationships with Providers fostered a sense of trust and support and contributed to communication and collaboration.*** All Executive Sponsors shared that relationships with Providers are positive, supportive, and built with trust. Executive sponsors and their Providers engaged in regular communication which facilitated their understanding of needs, collaboration, and ability to support implementation of the curriculum. The greatest challenge they struggled with was lack of time to meet and engage regularly.

- ***Executive Sponsors championed the work by being visible supporters of efforts whereas Providers championed the work by working closely with District Teams and providing professional development, coaching, etc. to principals and teachers.*** Much of the work this year focused on ensuring fidelity of implementation by teachers, planning for the continued work and sustaining the work at the end of the grant.

- ***Communication about the curriculum was generally top-down. Executive Sponsors mostly communicated with Providers, District Teams, central office administrators, and principals. Principals and teachers were expected to communicate with parents.*** Most Executive Sponsors viewed their direct communication with parents as lacking and an area in which they need to improve.

- ***Executive Sponsors have access to a lot of data, but data quality and utility varies with some reporting collecting data that lacked the specificity to provide them meaningful information.*** Those that desired more, or different, data reported wanting data about teachers' implementation and understanding of the curriculum and students' experiences with it.

- ***Although Executive Sponsors reported ease in collecting data, some struggled to find the time to analyze the data to allow them to use it as fully as intended.*** In some cases, this was an area where Providers offered support.

- ***Negative or fixed mindsets, leadership and teacher turnover, and lack of time for professional development and practice were barriers to program implementation.*** These were also anticipated challenges that could negatively impact the sustainability and scalability of implementation.

- ***Despite challenges to implementation, Executive Sponsors are trying to support sustainability and scalability by ensuring resources (people and money) are in place when the grant ends.*** Some Executive Sponsors noted that an added benefit of this grant is that Providers have helped them learn how to better utilize employees or develop better systems for activities such as professional development or coaching.

# District Teaming and Championing

**District teams involved multiple people in varying roles within the district including upper-level administrators, principals, math specialists, math Coaches, etc.**

> *"So, the experience with the District Team has been very positive. We've had a lot of involvement this year. A lot of buy-in. A lot of participation. What has gone well is making sure that we're including everybody that needs to be involved in the meeting, so that we're not having to relay information after the fact. We're all hearing it at the same time."*

> *"So, this year, our team grew larger and bigger. We're starting from the beginning process with having everybody on board and trying to connect with them every six weeks or every eight weeks. So, I have enjoyed just having more diverse perspectives in our team to help us understand what are some of the hurdles, what are some of the challenges, how can we make sure that the communication is going to the different stakeholders that we need to do. And also, the curriculum and professional development is reaching all of the stakeholders. So, this is the first time that, even in our professional learning plan, we included members of our district organization team because it's a larger team this year. So, we've got the equity executive director, bilingual director, special ed director coming and going through the professional development that we have conducted during the year."*

**Most teams were described as functioning very well as they met frequently and consistently, focusing on program goals and utilizing data to assess progress towards these goals.**

> *"I think overall, we are in a much different place than we were last year. So, even this year as far as getting the team off the ground at the beginning of the year, I think last year we struggled to understand the purpose of the team, why are we meeting? But this year we were very clear about the role of this team collectively and also very intentional about who serves on the team, making sure we have principal voice, making sure we have coach voice, making sure we have the voice of our APs. And so, this year, I feel like the team, we got started earlier, number one, but also the work of the team each month has been very focused around what's actually happening in schools. We have data every single time. We're working towards the goals and our plan every time. And it just feels like this year, and I think through a lot of intentionality and being very strategic, the team has a very clear purpose and more of a team focused as a district on the work of moving our Math implementation forward."*

> *"The District Team, they're fantastic, and I have to say, they come with a lot of experience, so they come with understanding different curriculum, and they also come with a lot of understanding around the schools. The team has spent a lot of*

*time really thinking about what does full implementation mean and how do we strengthen Tier 1 instruction across the schools that have been implementing Illustrative Math."*

**However, some Executive Sponsors reported needing a clear and shared focus and more time to meet to ensure this work has the greatest impact.**

> *"And because this was an isolated project, and honestly still because I wasn't here from the beginning, I do feel like there's still a little bit of that disconnect. Even though we try really hard to have those one-on-one conversations with the principals, with [the Coaches], and of course with the teachers, and they're doing a great job. It's just, I think connecting those bigger pieces is pivotal when you're talking about a full-on implementation."*

> *"I think one of the challenges that we have is it's really time, the common planning time that we have together to really be able to come and think about some of the areas that we still need to grow. I think we're good at thinking about the practices that are being implemented, but I think more time around next steps and growth."*

## Relationships with Providers

**All Executive Sponsors had positive things to say about the district Providers and their engagement with the district, describing them as collaborative, easy to work with, knowledgeable, and experienced.**

> *"Fantastic. They are always, I think not only like we've said, knowledgeable, supportive, helpful in every regard, but especially this year when we've had a lot of different transitions. I think they're also very honest when we need to hear the things that we know may or may not be working. And so, every step of the way, I feel like we've had trust and I feel like we've had transparency. If even from day one, I mean, of course, it's grown just because as time our relationship has gotten stronger. But I think just from a knowledge and skill base, of course amazing."*

> *"It has been a really good partnership. They have tried to try to listen and understand what the needs are with a district of our size and the history that we have…"*

> *"It is a true partnership with ANet. We come to the table. We have a common goal. They allow us to lead the work. They recognize our experience, our expertise. They recognize the value we bring to the work."*

## Provider and Executive Sponsor Championing

**Executive Sponsors noted that Providers championed implementation most frequently by helping to guide the work as "partners," asking questions, and working directly with those tasked to head implementation.**

> *"They've been partners. Co-pilots in the work. They've been coming in and saying, do*

*you need us there? Do you need us to help you build a communication piece? Do you need us to vet it? Do you need us to help write a communication? They've been right there alongside of us, as we've been championing the work."*

*"So, Instruction Partners works with our leadership and our teacher teams. Well, they work with our leadership team in helping support and direct the work from the sense of knowing what needs to be happening at the planning stage, understanding the internalization of the lessons process, digging into the instructional practice guide to make sure that principals are aware of what are the things that we should be looking for when we're walking math classrooms. So, they're working on that end. And I also think that they're supporting our administrators and a lot of work this year with our new instructional coach to support her as she's learning about Carnegie, as she's internalizing lessons, as she's able to help model support all of the delivery for our teachers in seventh and eighth grade…"*

**Executive Sponsors reported championing implementation by being visible leaders of the work and engaging across various levels (Central Office, schools, etc.) and roles (Superintendent, principals, teachers, etc.) in thoughtful conversations and review of data related to program implementation.**

*"But I think my direct support, my visits to classrooms on a regular basis and visiting our middle schools and walking classrooms and acknowledging the work that's being done specifically within math and the implementation of IM, providing those kudos and "that a boy" and "that a girl" kind of thing to our teachers and keep up the good work. I think those are the levels and that that's my level even to my assistant supe, XXX, to the superintendent as we look at those results and providing them with keep momentum, keep it going, types of things."*

## Communication

Executive Sponsors discussed communication successes and challenges with their Providers, district administration, school principals, and families/parents. **When communicating with principals and teachers, Executive Sponsors mentioned aiming to consistently emphasize the value of this program, to underscore Executive Sponsors' commitment to the program, and to recognize principals and teachers for their efforts and hard work.**

*"So I think I'll start with staff, meaning teachers. As far as communication, I think we've had to steadily revisit how IM came to be in our district that it was teacher driven and that getting the opportunity to support them in this choice, but then also partner with ConnectED and get provided the grant to continue the work was just kind of a blessing. We landed someplace and it was really fortunate for us that we were already going towards that direction. So, it was more about implementing with fidelity and then spreading those best practices. So, I think that part of the communication is still important, and we have to continue to revisit that with staff. So, I think the improvement would be when we have new staff, new math teachers come in and providing them with the background and onboarding them into the*

*work."*

As part of this, **Executive Sponsors recognized that communication needed to be short and focused, timely, and recipients needed to recognize the name of who sent the communication.**

> *"I think one of the things that we discovered early on is, we need to really shorten the length of communications. People aren't going to read past a certain point. So, we had to be more clear and succinct with the communications that we are putting out. And then also, we need to have a point person that the communication is coming from. … So, I think it's really who is sending it. And then also making sure that it's not super lengthy. That it's really clear to the point. And that if there's a deliverable or an ask in it, that it's clearly identified. So that's been some of the challenges we've been working through."*

> *"I would say that we came out early on, and communicated what the implementation cohort grant was, and what we were doing. And we communicated that with our community as well as our board."*

**Multiple Executive Sponsors expressed challenges with communicating with parents about the program and its impacts.**

> *"And when I think about the question of where could we improve? I think one of those things, and I think our math team does this very well, is collecting data around the impact of our work. We collect that data, but we don't do well enough is communicating within and outside of our immediate school community on the progress that we have made and the impacts that we've seen. So, I think we could do a lot better job with our data storytelling that would share our work with a broader audience, and that is really been at the forefront of my mind. So that's an area I think we could definitely get better at."*

> *"Where I think we face some challenges, and it's not just with this grant, it's as a whole is when we start talking to parents and community members about what we're doing. So it will be, I'm going to use the word interesting. We're actually going to do a parent stakeholder group in March to prepare them to say, what have you noticed that your students have been doing differently? And for the second cohort to say, these are the expectations of what you should see."*

**Many Executive Sponsors relied on principals and teachers to communicate with parents and caregivers about the new math curriculum and point them towards information on websites that they could access to learn about the program.**

> *"So, we've also been able to show teachers how to pull the reports from the existing resources that we have and then be able to provide that in a parent letter."*

> *"But at this point, we at a district level have all the documentations, but we are relying on each individual school and teacher to move things forward for that more consistent communication with parents."*

**Executive Sponsors noted that communication with parents and caregivers was especially hard when there were rumors spread among parents and caregivers or groups of vocal dissatisfied parents or caregivers.**

> *"And it's like how do you address some of these changes when the rumors are out there that this is gone and our tier one behavior system that we've worked really hard to implement is gone? It's like, no, there are people that see the good work and see the change and want what's best for kids."*

## Sustainability

Executive Sponsors reported thinking hard about how to sustain grant efforts and impacts moving forward. **Executive Sponsors mentioned trying to ensure sustainability by identifying key people, roles, and responsibilities within the grant and ensuring these are in place after the grant ends.**

> *"I think that as far as sustainability goes, I think that that's definitely been something that we've been able to shore up more this year when you talk about unpacking the roles and responsibilities that we have, when you're looking at every stakeholder, whether it's a district level, a campus level administrator, the role of the instructional coach, the role of the PLC lead, and then the role of the PLC participant. So, that in and of itself, I think when you're talking about the planning process, usage of all of it, we have everything on there from how we lesson plan to our PLC preparedness to our instructional strategies that we should be seeing to our walk-throughs. So, I think that's one piece that we've laid out for the entire district to be able to see of, this is everybody's role when we were talking about teaching and learning and curriculum and instruction, whether it's the RLA curriculum or a math curriculum."*

> *"So, I think our shifts have been how do we start to take this over. Right? So as a district, and as we're over halfway through with the grant, how do we begin to build in processes, procedures, people even that can continue doing these learning walks, continue to have this focus on math instruction?"*

**Executive Sponsors also shared that in many cases district personnel are taking on or co-sharing Provider responsibilities as a step towards being able to do this work independently.**

> *"Another aspect of this is working with TNTP and curriculum associates together to build a playbook around what are the things that we are now putting into training when we are facilitating our own in-house training, and then the collaborative time that we're having with our teachers, how are we having our Coaches facilitate and foster that? Going back to that model, even though that we're only working specifically with our middle school Coaches, we are now using the same documents and logs with all of our Coaches at elementary and high school as well."*

> *"So, we're doing a lot of work around professional learning right now and just to the point where you're talking about with coaching…we have high school teachers on special assignment, because we're using IM at the high school as well. So, we've been*

*able to build capacities there where our high school folks and then the alignment that's happening are able to, the vertical alignment, have those conversations with middle school. Middle school is able to talk and to see in high school. And so, I think the sustainability is being built within those collaboration moments with the coaching moments and I think the continued professional learning."*

**Executive Sponsors also noted that their districts were attempting to continue to budget for this work and fund supporting positions such as Coaches, math specialists, etc.**

*"Yeah. I know as far as continuing it, my superintendent is a big advocate also, and a believer of the curriculum that we're using. He knows that we're using high quality instruction. He knows that. As far as continuing it, that's something that he always makes sure that that's one of the things that we are going to continue to do."*

*"I would say that we've continued to budget and put aside money. We have a goal in our LCAP particularly focused on this work. And our community has asked for it as well to help sustain it. So, we are not reducing our math team in the coming year. We have found a way to bring that funding into our budgets and be able to sustain that. So that we'll have stable funding for those positions moving forward and it won't be a, 'Do we have a grant to cover this? Do we have a grant to cover this?'."*

**Many noted that they had learned from Providers how to utilize people more effectively in their roles and planned to continue to do so after the grant has ended in support of sustaining grant efforts.**

*"The skills and tools that we've learned through this particular implementation model, now we can use across the board with all of our Coaches, the way we record coaching cycles, and how we report the outcomes of coaching cycles. How principals and Coaches work together is something that we can take to scale and make sure that we're able to sustain our coaching model with evidence when there's conversation about what's working and what's not working and what should we adopt or abandon. We definitely want to be able to hang on to a model that we know works for teachers, but we also have to be able to show policymakers the evidence of it working."*

*"One of the things that I think this grant has really helped us to understand is how to actually provide a coaching structure that can be carried out, a realistic coaching structure. I think prior to really engaging so deeply in the grant, we were providing Coaches, but without necessarily defining what would make them successful. We were not necessarily saying these were your exact tasks."*

**Others are relying on administrators and/or teachers to sustain this work after recognizing the positive impacts on students who are being taught with the new curriculum.**

*"Lifting up the effectiveness of the implementation, and just how it's supportive of all of our students. The biggest thing, and this is not just for this, but in public education*

*as a whole, is creating redundancies in institutional knowledge, so that it's not human dependent, one person dependent. That's really the focus. If I were to leave, is there going to be another champion for this? If Mark were going to leave, is there going to be somebody else who's going to be both a champion and the expertise around math, and how this is going to roll out? I think that is key, and something that we've been working on."*

*"I fully think that our teachers are, with the work that we're doing, going back, this is feasibility, with the work that we're doing with IM, with the supports that we're receiving to talk about implementing with fidelity are going to start seeing the types of results that will provide them with a good understanding of, wow, okay, we've come a long way since when we actually started using this during the pandemic, because that's what happened. We started using a new math curriculum when the pandemic hit. So, you had distance learning, you had new math curriculum, you had zero training. So, we're just overcoming all of those just barriers and/or I don't want to say roadblocks, just there were a lot of challenges there."*

# Implementation

## Implementation Planning

In terms of implementation planning, **most Executive Sponsors noted that their Providers worked with them to plan at various levels (across the district, for a particular school, etc.) by reviewing and discussing data with the Executive Sponsor (and their team) to determine progress toward program goals.**

*"What we've done, is I know that we've looked at data a lot more closely together. I mean, I know as far as pushing out our plan is making sure that we are targeting those particular populations, and we work closely with the teachers that have those kids, especially in need, and helping them identify the areas [where students need support]."*

*"We have regular meetings, and we talk about successes, and we go through calibrating together what's working, what's not working. And we do that regularly, that's just a part of our process."*

## Implementation – Facilitators

**Executive Sponsors identified multiple facilitators that drive implementation. Many Executive Sponsors noted that consistent messaging that clarifies expectations sets the tone for the work.**

*"I think, first of all, starting with a vision and having clearer expectations at the district level and saying this is the curriculum. There are expectations that all of our children. When we say all, we mean all, behind closed doors, open windows, whatever. Every single child deserves to engage with high-quality experiences, and they deserve to engage with the same type of level of experiences. I think getting to*

*that level to say this the thing is the thing, this is it, this is what we're going to do, this is what we're going to invest in, including our professional learning, teacher practice, this is what we're looking for, I feel like that is definitely, number one, having a cohesive vision and also expectation set around it. This is the vision. This is a program that is going to support that vision. These are the things that we're going to build to make sure that vision we see to it."*

*"I think consistency. I think the consistency has been effective. I think anytime that we can pull principals together and provide PL to them, that has been effective because they get a chance to actually see and understand the expectation. They know what to look for when they go back."*

**Executive Sponsors noted that clear messaging supported buy-in from school leadership, particularly among principals, to ensure implementation.**

*"I mean definitely, buy-in. Definitely leadership buy-in. School buy-in. And school conditions in place, to set up for success. Where they have adequate planning time, where they have adequate... An academic planning facilitator who's not doing 50 other things. That they're able to dedicate the time to this work. And understanding of roles and responsibilities on both sides of the fence. On the leading educator side. And on the district side of, who's responsible for what? And being able to balance all of those pieces."*

*"I think leadership that supports and understands, and I would say school level leadership that supports and understands the why behind the curriculum implementation. I would also say teachers with the same knowledge. And I would say teachers more of the why behind it, where I think principals probably need a little more of the how. Right? How to get teachers to use it."*

**Executive Sponsors also reported celebrating impacts and/or highlighting the work as another aspect of messaging that supports buy-in and facilitates implementation.**

*"And one of the other approaches we're taking, in addition to the consistency, in addition to the one-on-one, we're doing some highlight filming at one of our schools… So, our team is there as we speak, and they'll be in classes getting footage of the kids who are engaged in the work, as well as the teachers. So, they'll be interviewing the teacher as the teachers, as well as the principal. So, we're excited about that. So, when schools see what can happen, and not to mention that it shows in their data, it shows in their data, those schools are implementing it as they should. So, we are definitely excited about that."*

*"I think we have the opportunity just to continue to shine a light on the work and shine a light on the impact of the work and continue to try to help everyone understand what the expectations actually are of using this curriculum. Even going into our third year, I think we still have the opportunity to continue to say, "This is what it is, this is what it's not, this is how we're using it, this is the impact we've seen.*

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*This is what teachers are saying, this is what principals are saying." Just continuing that messaging throughout."*

**Executive Sponsors also identified providing opportunities for teachers to deepen their content knowledge and understanding of the curriculum as a driver of implementation.**

> *"So, I think it's teachers really being able to understand and work through the math. I think one of the biggest things has been deepening their understanding beyond just knowing that the IC and knowing it is frequently tested, but them actually having to struggle with working through and showing all of their internalization documents. I think that's been really pivotal. I think that also just going away from just process, process, process, especially for sixth to eighth grade. I've seen that as being a really big change for our math teachers as well."*

## Implementation – Barriers

Executive Sponsors identified three main barriers to implementation – both current and anticipated. **One of the three main barriers noted by Executive Sponsors was mindsets - and particularly teachers' mindsets - regarding students' abilities and/or the teacher's own desire to adopt a new curriculum.**

> *"Mindsets. The frame of mind for some people. I did mention about that deficit mindset that some people have across our district. I think that's the biggest barrier, what people think of the students that are coming through their doors, so number one. Number two is this perception that there isn't enough time, even though if you plan it appropriately, you might be able to target all of the elements within the curriculum that are targeted and aligned to the standards."*

> *"The biggest barrier is helping still shift some mindsets about the program and what it actually is and what it actually can do for kids."*

**Teacher and administrator (e.g., school principals and Central Office administrators) turnover was another barrier to implementation mentioned by a majority of Executive Sponsors.**

> *"I believe probably change of leadership multiple times."*

> *"I think another barrier we will face is a teacher shortage or a teacher churnover. Unfortunately, we will see some teachers retire. So, then the barrier becomes, and it becomes part of our sustainability plan. How do we ensure if I have a new teacher coming into a school, they will receive the same level of training that we've provided. So that looks at our capacity building for delivering this training in an ongoing fashion."*

**The other major barrier negatively impacting implementation identified by Executive Sponsors was time for teacher professional development and practice.**

> *"I think one barrier, and I don't think this is unique to math, one barrier is the time necessary to provide professional learning for leaders and for teachers to truly*

*change the math experience for students in the classroom. We have four pillars in our math initiative, and it's curriculum assessment, leadership and instructional practices. And to truly impact all four of those in the way that you need to, it just takes time. So, time with leaders, time with teachers, and just time for it to take hold and have an impact that you can say, "This is work worth doing and we need to sustain it." So, it requires a lot of energy and effort on the entire math team's part to be able to answer those questions and provide the data to show that we're on the right track."*

**Executive Sponsors shared that without teacher buy-in and support, teachers would return to traditional teaching methods, districts would drop the new curriculum, and/or other programs would compete for schools' time and attention.**

*"Other barriers? The default to traditional teaching patterns and algorithms in math, and the way that we go. If you're not continuing to push and move forward, that return to the status quo happens a lot, and just being cognizant of that."*

*"Well, I'm always concerned that people are just going to switch curriculum very quickly and say, "This didn't work," or "Let's move," without really putting the time into it."*

*"An interesting recent barrier is the strong gravity of early literacy, and that being the large focus of the district, and just drawing funding, attention, and time away from some of our math initiatives."*

## Supports Received

**Executive Sponsors reported receiving multiple supports from Providers around organizing District Teams, planning, implementation, and data analysis.**

*"So, we directly work with Teaching Lab. The primary support is coming from them in terms of professional development that they provide for leaders this year and for teachers. So, there are two parallel sessions, plans that are going out in both ends. At the same time, Teaching Lab was able to provide some consultant services. So, we do have one of their members… that comes in and works with our Coaches in order for our Coaches to have better understanding of the curriculum and then start planning how to build to capacity. So that has been very helpful. There is some other support in terms of organizing what the grant requirements are versus the data versus managing all those things on the back end. They have been very instrumental in supporting us, organizing. You need a district implementation team. You need this meeting to be held. You need these agendas. So, they have helped creating those systems and structures that we technically did not have or getting in the habits of developing those."*

*"So, the supports we receive from them are the planning and preparation to the trainings. They also meet with some of our teachers in an after-school support forum if the teachers choose to come onto those. We do use the funding from the grant to*

*provide to fund a teacher on special assignment that works directly with those schools that are part of the grant. So, she goes out and works directly side by side and Coaches those teachers. We have purchased some additional training materials for teachers and supplemental instructional resources for them out of the grant. So, it has brought a lot of supplemental pieces that we may not have had. It has also brought that monthly professional development to teachers."*

**Executive Sponsors described other supports that were provided to District Teams, principals, coaches, teachers, etc. including professional development, coaching, and support with data analysis.**

*"The supports that we receive is from Agile Mind and the Dana Center and I think they're amazing supports because they literally come and they provide the special development, the coaching, they stay behind. They work with the leaders on the campus, and alongside also, with the teachers. They've also helped us enhance what we've already... The teachers. Oh my gosh, you just went out. There you go. With those lead teachers, as far as helping them grow. As we move forward, they're identifying more things that we can improve on and that they can improve on as well."*

*"With our teachers, one of the things is that they've helped them identify some of their strengths and also strengthen their weaknesses, as far as the content and as far as how to deliver the instructions. I know we're becoming a little more data driven, so they've taken a really data deep dive where the teachers are really looking at the data to see how they're going to inform their instruction, how they're going to change it, what's coming up next. I think those have been great things and great strides to our plan, as far as how to make sure that we reach our goal."*

**Executive Sponsors mentioned that Provider supports frequently filled needs or addressed areas where districts lack capacity.**

*"So one of the greatest things that this is giving us is an outside expert and or an outside group that has the time to put all of those trainings together and to focus on the formative feedback that we get back at every session to be able to make those tweaks where my internal staff would not have that amount of time or the resources to put together the level of training we're providing."*

*"Leading Educators also offers us coaching support for our academic planning facilitators. We've been working with them to get the data and understand what's happening in those coaching sessions. And what the feedback is from APFs. And they're also from the Leading Educators side of just helping us develop as facilitators, as designers. And building that capacity on our team."*

**Executive Sponsors also indicated that Providers have been responsive when working with districts and their staff.**

*"I think that the supports that we receive from them is amazing because they're just a phone call away, and they're always willing to take our input as far as what we're*

*doing and what it is that they can support us with.”*

## Fit and Feasibility

Executive Sponsors discussed ways that they assessed the fit and feasibility of their new math curriculum. The fit of the curriculum was usually assumed to refer to the fit of the curriculum as it relates to teachers' abilities to teach it. To assess this, multiple **Executive Sponsors reported utilizing data gathered via observations, walk-throughs, surveys, etc. to assess teachers' abilities and readiness to teach the curriculum.**

> *“Again, going back to the regular progress monitoring, really looking at the screener data that we have across the district and seeing our students responding, surveys around where is the principal voice around is this working in their schools, and it's all been very, very positive. I think right now the big question is we have our mid-year check happening, and that's a walk-through, looking at specific indicators, so I think we're going to be coming back to really look at that data and we'll be talking more about some of the challenges, so I would be able to answer this question better probably at the end of the month.”*

> *“So, I think probably at the end of year number two, we're going to try to figure out either having focus groups or a little bit of more of a conversation to understand this curriculum that we have in front that we are entering in your number two, what results. How is it impacting teacher practice? How is it impacting student learning in a bigger picture?”*

**In terms of feasibility, Executive Sponsors reported working with District Teams including teachers to ensure that they have time to teach the curriculum and other supports they need to facilitate its implementation such as professional development, coaching, etc.**

> *“So, we took the scope and sequence this year. We did make some revisions too, the guidance we gave to schools about the number of days. We kept hearing the timepiece. So, we built in weeks of time into the scope and sequence for them to find time to review … So, we really tried to make sure that our scope and sequence was built in a way to be responsive to what we heard as far as time goes. And then, also help them to think through, here's some other ways you might be able to support kids who are not on grade level, kids who are struggling with multiplication facts or struggling with still basic addition. Here's some ways you can support them through intervention or other times throughout the course of the day.”*

> *“So, I would say in terms of feasibility, the workshop model, small group instruction, one-to-one instruction is what we really have tried to emphasize in terms of reading. This current math adoption fits into that very well. It does a lot of the analytics for the teachers so that they're not trying to... or have to figure out which children would work well on what skills they're trying to work on in the small group or one-to-one instruction. I think as with all, moving forward prior to COVID not everybody was proficient in using technology.”*

# Data

**Executive Sponsors reported utilizing multiple data points from a variety of sources to understand program impacts (e.g., teacher and student outcomes), including teacher and student-level data captured via surveys, assessments, observations, etc.**

> *"I know that they do walk-throughs, so when they do come, when they come and do 3D with us, I know that's one of their... They have a form that they do when go do the observations, because they talk through the observational protocols for our admin. So we get to walk into the classrooms and kind of observe what should be happening, whether or not, enough people or not, but at least they have that protocol and they've been trained on that, our admin and our district leaders…We do look at that data, what is it that the teachers are doing, and how many times was the teacher directed? How many times was the student directed, and so on. We do look at data when it comes to it."*

> *"We are digging into a lot of data, and I think I brought that up earlier. We're actually administering our teacher and student survey here in the spring, but we're looking at growth over time for student and staff efficacy, capacity, and perception of themselves as mathematicians and math educators. As well as where they think we're looking at specific academic outcome data."*

**Executive Sponsors rarely looked at any one data point in isolation, but rather studied multiple data at once to address specific areas of inquiry and triangulate findings.**

> *"So, I think we have to look at data from multiple lenses. We can look at first the formative data that we get from the end of the sessions to know where we need to make improvements. We can also look at data from teacher understanding. We have brought in student work to professional development to try and look at it from a formative lens, looking at what did the students know and understand. But I think then we also have to look at data from a summative assessment. So, looking at the New York State assessments to see where the students showing either a high understanding of the concepts and skills or a lower understanding of the concepts and skills, because that data will also help us inform where we need to put more prioritization to the professional development. We can also look at data from, we do have the Mobi Mac system within the district. We also have IXL. So, what does the benchmark assessments that we're using within the district also tell us about skills and understanding. So that's another set of data that we can use to help us support those professional developments."*

**Some Executive Sponsors noted the need to analyze data more intensely, versus merely reviewing them, to guide decisions and next steps.**

> *"And we look at data consistently, but I think that we haven't been as intentional with it. So, we look at it, but then, now what? So, I think as a district level, we need to be*

*more intentional about the use of data and how to use it…"*

*"I mean, I think we use a lot of data. I would argue, I don't know that we always, so my saying is we're very data rich, but we're action poor. And so, kind of like what I said earlier, we talk about data a lot. We pull down reports, oh look, this teacher or this grade level or this school. But then that's where the conversation stops. Right? And so, we've got to take it to the next level of what are we going to do with this data to inform instruction? How are we going to make changes? How are we going to modify? So, I think that's really important."*

## Data Quality and Utility

**Executive Sponsors shared that most of the data gathered are useful unless the data are too broad or do not help them pinpoint where to make changes.**

> *"So, the one that I still don't really quite understand is teachers are taking the surveys. And the surveys speak more is this professional development helpful to you versus I want to move forward into what did you find helpful and how did you use it or come back and tell or how have you seen any type of change, even in student work."*

> *"I think it's the more overarching general questions and feedback forms. Was this session meaningful to you? Most people mark, yes. Yes, this was. Because I came, and I got something out of it. So, I think it's narrowing down specifically to specific parts of a professional development if that's [inaudible]. Or if they're doing a learning walk. Really just making sure that we're not just asking more generalized questions. We're asking specific questions."*

**Others questioned whether some data were the "right" data for what they were trying to assess, such as using student assessment results to understand teachers' understanding and misconceptions.**

> *"I think our state assessment data and our benchmark data is a very helpful tool in the fact that it gives us student understanding of skills. But at the same sense, I don't know if that is truly the best form of data because we are looking at teacher understanding and teacher misconceptions. So, do we need to do more of a pre-post test on the teachers for their understanding? That may be something we need to do on a regular basis going into each unit that we haven't started, but it may be a piece that should be implemented."*

## Data Needs

**Executive Sponsors had varying data needs although a general theme was that they wanted data to help them better assess teachers' and students' perceptions of and understanding of the content.** For example, some Executive Sponsors shared that despite the plethora of data that are gathered, it was not always clear where teachers need support.

> *"And in the same talking, it's trying to ask teachers, "What supports do you need as*

*you are implementing?" because IM is a difficult curriculum. It's very challenging to implement. It's not traditional. You have to change a lot of things, even about what you believe. So, I don't think that that data is appearing to be, or I haven't accessed yet."*

*"Well, I wish I knew the, if I could give every teacher a percent of implementation, I would love to see that somehow so that I could also know then where to support. Sometimes I feel like I'm too far removed to be able to give good support and good suggestions, because I don't know the underlying cause. And that's just the roles that we're in. So, I wish I had some way of knowing or seeing if we ranked every single teacher in our district in implementation where the commonalities, where the trends tend to be."*

**Others noted that they wanted student feedback on how they perceived the curriculum, again in an effort to determine better where students need support.**

*"I think we're collecting student data [but want] data as well on the students' perception, like, "How did you feel about math before as how you feel about it now?" I would love to get that data directly from the students. That's whose experience we want to improve in the first place, so that data would be really powerful."*

**Similarly, others wanted data that spoke to individual students' core understanding of math versus data that reflected classroom-level understanding of standards.**

*"I would say that we don't have enough... When I think about assessment, I see it on a spectrum. The closer it is to the students, that type of assessment, the minute by minute, the week by week, the unit by unit. Those are the types of assessments that have a more immediate impact on how students achieve. Whereas i-Ready or state assess, those types of assessments, diagnostic assessments. Those are closer to the standards. It helps us determine whether or not students are achieving the standards that we had set out to do. But it doesn't tell you enough about what do we need to do tomorrow to support students."*

**Some Executive Sponsors reiterated that they had enough data but ensuring that the data collected provided information that can be used for decision-making or could be analyzed easily and quickly were bigger issues.**

*"But you have to look at it overall. Of all the different pieces. I think as we move ahead too, we have to just make sure we're asking the right questions in any type of survey or feedback form. To make sure that we're pulling everything that we need, to be able to make any... Whatever way we go, moving ahead, we need to just make sure that we have the data to back it. And that the questions we're asking are the right ones."*

*"One of the things that I wish were in it, and I think we're going to work on, and I have a plan, is to make my teachers a little bit more digital savvy within the platform,*

*so that way, they can turn the instruction around really quickly. I want to put that just in time intervention."*

## Data Collection and Sharing

Executive Sponsors have access to quantitative and qualitative data collected through teacher or student surveys, exit tickets, rubrics, observational forms, and assessments to informal conversations, observations, and check-ins. For most, collecting the data is fairly easy, whether through Google forms or via other electronic systems or platforms. **Executive Sponsors then share these data with a variety of critical perspective groups, including District Teams, superintendents, principals, and teachers.**

> *"Right now, I pull out a lot of the data myself, and then I put it together because I do present it to my superintendent, because he also wants to know where everybody is at. From there, we do share, I share it with our principals. I meet with our Coaches, and I do go over the data with them to identify the students, the teacher or the campus or the grade level that needs the help. Then when we meet, I'll share it out through the appropriate district personnel because if it's my special ed students or my special ed population that still needs help, I reach out to XXX because I have to keep her abreast for her program, the same thing with XXX for the bilingual. It's constant."*

**Some Executive Sponsors talked about the need to be sensitive about what data is shared with whom and how, recognizing the same data may be presented in different ways to different audiences.**

> *"I have to be very strategic when it comes to that [sharing data], because that's one of the things that I think people need to understand; it all depends on who your audience is."*

> *"A large part of my job is collecting data and sharing to different stakeholders. I really focus on trying to have a symmetry of the narrative at the different levels. They're not quite the same, but they mirror each other in different stakeholder groups."*

**Executive Sponsors shared that analyzing data to understand trends, findings, or pinpoint what needs to change, is more challenging than the collection process itself. Data analysis is time consuming and difficult due to a lack of systems that easily output or connect data.**

> *"One of the things that I also wish is that since we use other platforms, third-party vendors, as far as to collect data, is that if it could just be easier to mesh it with, let's say, we use GMAC, for example, to collect data. My admins at the district level that collect data as well, they're so used to that. When I have to pull out data from Agile Mind, it allows me and it's easy. It allows me to do it through a question, I'm able to identify needs. But I just think if it would work together with a third vendor when it comes to reports, I can pull out a report and stick it in here, a CFE file, stick it in here, make it easier for somebody else, I think that might expedite it a little bit quicker if I need help from the district to help me out."*

> *"I think challenges is knowing kind of having a one stop shop for data. And so right*

*now in our district, we have multiple different data platforms that we use… And so, it's frustrating because we're so data rich, which is great, but it also isn't in a singular platform. So, if I want to look at a student's performance, I have to go to one platform. But if I want to look at discipline, I have to go to another platform. If I want attendance, I have to go to another platform. And so, it's hard to see a longitudinal vision of a student when it comes to data, because all of our data pieces are separate when you look at achievement, discipline, attendance, mental health, I mean, all of those things. So, trying to get all of that triangulated on a student really is difficult in a school level of trying to figure out what is the data saying about kids. So that's definitely where we're falling short.”*

**Lack of time and ability to integrate data into a coherent story or means of understanding its message is also an issue.**

*“I don't think we've run into a lot of challenges. We've streamlined it, so everybody has their own link for their school. I think it's just them finding the time to actually get in there and look at it. And then understanding, okay. Here's the data. Now, what do I need to do with it?”*

*“I just don't think that we're to that level where we have a good protocol to review data. What does the data tell us? And then the really important step, what do we change because of what the data tells us? And that's the last step that we're missing.”*

# Coaching Listening Session Results

## Key Insights

- ***Coaches worked to build relationships with teachers and other coaches before implementing strategies to actively engage teachers' understanding and use of the curriculum.*** Coaches recognized the need to develop safe spaces and personal relationships with those they are coaching, noting that their role is not that of an administrator.

- ***Coaches utilized multiple strategies and subsequent data/evidence to identify areas of need and address those areas.*** Coaches reported observing classrooms, modeling lessons, reviewing and discussing student and teacher data (formal and informal), providing timely and usable feedback, and offering professional development opportunities to help teachers learn the new curriculum and attempt new ways of teaching.

- ***Coaches are confident in their use of strategies but noted key factors that would maximize their coaching impacts.*** To increase their effectiveness, Coaches reported that they need 1) consistent messaging (verbal and non-verbal) from district and school administrators about the importance of coaching, 2) dedicated and protected time to meet with the teachers, 3) additional training or resources on the curriculum, and 4) professional development around coaching.

- ***Overall, communication between Coaches and Providers is effective, with Coaches highlighting positive relationships with Providers that facilitate positive communication, flexibility, and responsiveness to feedback***. The effectiveness of communication between Coaches and school staff is more mixed. Whereas most Coaches have the ability to communicate directly with teachers, communication was frequently delayed or lost in other communications when they had to communicate through school or district administrators.

- ***Coaches utilize multiple forms of data to support their coaching practice and place the highest value on data that provide them insight into teachers' teaching and students' understanding.*** Coaches utilize data collected via teacher observations/walk-throughs, teacher surveys or assessments, student assessments – whether formal such as district-wide testing or informal such as class exit tickets and conversations with others including their coach or curriculum developers.

- ***Coaches anticipate several challenges in the coming year including turnover and transitions within the schools, lack of teachers with the needed content knowledge (especially where long-term subs are in place), lack of teacher capacity to plan for and implement the curriculum, lack of teacher understanding of the curriculum, resistance from some teachers to shift belief systems to align with new ways of practice, and ensuring fidelity to the curriculum content and process.*** In addition, many Coaches noted it will be hard to coach teachers who have had varying amounts of professional development related to the new curriculum.

- ***To maximize teacher's fidelity to the process, Coaches highlighted the need to improve teacher content and pedagogical knowledge of the curriculum by providing them time and resources to engage in deep learning and practice of the curriculum.*** In addition, leadership support is needed to encourage the priority of curriculum use and remove barriers to teachers' time while also emphasizing the importance of utilizing the curriculum as intended and holding teachers accountable to high-fidelity practice.

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# Communication

Coaches discussed communication successes and challenges with their teams and within their districts related to building buy-in and support for implementation of the math curriculum. Some **Coaches noted that internal communication among their teams was strong but communication within their districts was more challenging,** whether due to lack of engagement by district personnel/principals, competing messages and priorities, or because of bureaucratic layers impeding communication.

> *"I would say as far as the implementation team, I think the communication has been there as far as the calendar invites, the newsletters, the emails, information goes to people, it is blasted, it's on websites, it's there. I think the challenge is making sure that people, one, check their emails. Two, they also know where to find the information that they need. And three, knowing who to reach out to when they are confused. Some principals have not been as involved, they are aware of it, but because they are not as deeply involved that when they see the email, they're not sure what to do with it. And so, I think that's been a challenge from a principal perspective."*

> *"When I reach out with the staff directly, it's great. I think communication is pretty clear. But when I have to work through school leaders, it can get a little bit spotty. And that makes sense, right? I'm working through someone else."*

**Coaches recognize that shared communication and learning how best to communicate within different organizations are ways to address communication issues.**

> *"And the plan wasn't something that we told to [the district]. That was communicated together, here's how we want these days to go. So, I think the communication is just very solid and not wavering."*

> *"And I've also been doing my own learning about how messages go out to school leadership and how messages go out to educators without the district structures that are in place so that those messages are being received."*

**Coaches supported bidirectional communication with teachers and other coaches by developing supporting relationships and respecting them as professionals. Coaches tried to make communication consistent, strategic, and timely, but not overwhelming.**

> *"So, I try to be extremely strategic about providing information that's in a timely manner, but yet not on all the time so they start ignoring my emails. And then on an*

*individual level, when I've been working one-on-one with teachers, that is typically I will go in-person and meet with them. And then once we've met in person and established a, what are we going to work through kind of goal and whatnot, I usually send a calendar invite and then let them know when I'm coming next. And we schedule it around their prep periods typically."*

**Coaches used the same approach as noted above when communicating with school leaders, recognizing that school administrators are quite busy with limited time in their schedules.**

> *"I text them, we talk on the phone, we email. I often send them thoughts prior to our meetings so when we're meeting in person, we can jump right into the content and topic... So just making sure I'm very prepared for the meeting and streamlining my communication, making sure that things are planned ahead, far ahead of time, and giving them reminders so nothing really slips through the cracks."*

# Implementation

## Implementation Strategies

Interviewees discussed the strategies they employed to support their Coaches. **Several Coaches noted the importance of first establishing relationships with their teachers as well as fellow coaches**. This was done before or while utilizing coaching strategies to assess where they were at in their understanding of the curriculum and implementation prior to providing support. To build relationships, Coaches engaged in active listening and reflective questioning; planned lessons with teachers such as during professional development, professional learning communities, or during planning times; and conducted non-evaluative walk-throughs to observe teachers and assess their current levels of facility with the curriculum and instructional techniques.

> *"[So, I say] 'Hey, if there's anything that you would like my two cents on it, feel free to share with me.' I think with all five teachers, I can use the cognitive coaching approach. Well, I mean also similar to what Elena mentioned in the book, just get to know the teachers instead of just coming in that authoritative stance. We are actually here to learn about each other. We are going to grow together."*

> *"I think just having the chance to lesson plan with them. It's just that informal conversation that you already mentioned. Well, I mean with two of the teachers, they also found that I'm modeling the lesson in their classrooms was helpful. I have done a couple demo lessons in the space, and then I also have co-taught with some of them and just try out the strategy together because they didn't feel confident enough to do it on their own. I was like, "Yeah, I can model it, or we can co-teach together." I think those were super, super helpful. When we debrief together, instead of me asking all the questions they answer, we reflect on the lesson like students' interaction."*

All Coaches used a multi-strategy approach, often cyclical in nature to support teacher content understanding (e.g., of the curriculum, of math knowledge generally) and pedagogical understanding (how to teach the content and curriculum) and increase implementation fidelity. **Strategies utilized**

included planning with teachers, providing professional development to teachers, observing them as part of walk-throughs (and having other teachers participate in the walk-through), reviewing student work products, and assessing data findings from student or teacher surveys or other artifacts to support teachers' knowledge and skill gains.

> *"Coaching cycles, Learning Walks, Integrity Walks, PLC. And every week we have common planning time with our math teachers in addition to PLC."*

> *"So, I'm using observation with debrief and feedback. We have analyzed student work; we do co-planning. There's been lesson study and unit unpacking. There's been modeling."*

**As part of all strategies, Coaches noted the need to provide timely and non-threatening feedback.**

> *"As far as coaching in general, I really used real-time coaching as well. For example, last week I went into a teacher's classroom, and based on my feedback to her... I met with her and based on my feedback to her, she asked me would I come back and just to look for improvement with what she and I discussed. And so, I went back, and then I provided her feedback based on what we had talked about our next steps were going to be, and that seems to really help. I would just call it an informal coaching cycle. It's nothing that I write down because I do like to keep my meetings with my teachers confidential. But it is the coaching cycle in a sense that I observed. We met. We discussed next steps. I went back to look for those next steps, and then we debriefed again."*

**Whereas most Coaches work directly with teachers, some also work or work solely with other school-based Coaches to support those Coaches' direct work with teachers.** In such cases, most Coaches meet with the school-based Coaches to plan and review lessons.

> *"I do provide support to schools' school-based Coaches and principals. And that support is in planning, it's in making sure that there's a consistent message in the school about expectations. It is in introducing them to the curriculum or helping them to further understand it, classroom walk-throughs, and observation, and debriefs. And I have also provided professional development support."*

> *"I work with the math coach in one of the schools I support. This person is responsible for coaching the math team, building professional development, being a leader and a thought partner with the math team. So, I coach her more on leadership capacities as well as just building a little bit more of the systems, such as the systems that I use, provide coaching and feedback, how to unpack lessons and units with other teachers."*

**Most Coaches also reported that they are responsible for supporting administrators' understanding of grant efforts, including the curriculum, teaching strategies, and expected impacts.** One way a majority of them do this is by leading administrators on walk-throughs and sharing what they should be looking for as they observe teachers.

> *"Same here, just definitely sharing things that I noticed through walk-throughs and*

*PLCs with the admin, but also discussing data with them so that they're aware of the data points that we're utilizing and it's not just the standardized assessment data, but giving them our classroom data so that they kind of know where we are in classes so that when they go and do walk-throughs they know what to look for."*

*"I was just going to say that sometimes during those, I don't know if we're calling them instructional rounds or classroom walk-throughs, but we invite the site leaders and that's really helpful to help the administrators go through the classrooms and kind of coaching them through what to focus on when they're going through classrooms if they're not evaluative but rather seeing what students are doing. So, we'll invite site admin into those walk-throughs."*

## Implementation - Facilitators

Coaches noted multiple facilitators that support their work across various school levels and roles. For example, **at the leadership or broader district level and into the school level, consistent messaging was noted as a mechanism for increasing teacher buy-in into the work**.

*"I think one is everybody being on the same page, LE wise, and the school district, and the people that are on the ground floor doing the work, the teachers and the APFs. Just having very clear expectations of each other and seeing how our work is connected."*

*"I would say, big picture, time, and communication. Sometimes information is piecemeal and then you have a group who's doing one thing and then another group's doing another. Even though we received the same message, but that follow up with, yes, I nodded my head in the big meeting, but who's following up with me after the meeting to make sure I truly understand. So, we've been working with checking for mastery. That's more specific to what we're doing, but I think that's where we are. We've been trying to correct that on the big level right now."*

**Parallel to that messaging is leaders' buy-in and meaningful support for the work.**

*"Leader investment, coherent communication between the leader, the coach, and the staff. "*

*"I think our district, they're very available and they really listen to our teachers. When I'm relaying information from my teachers or questions from my teachers, they really take it to heart. And I think they have, since last year, they have really taken those pieces and they've developed so many different tools for our math teachers in their canvas site for... I've got several teachers new to open up this year, and they've really created a great support system for those teachers."*

**Additionally, Coaches reported that having positive relationships with teachers and leaders facilitates buy-in from both groups.**

*"So, I think just in teaching it's relationships first, because they have to trust you. They have to know that what you're doing. So, I think as a matter of relationships and the*

*why, right? So, combining those two things, especially what we're trying to do with confronting systemic racism, it's hard conversations and so you can't really have that unless you have the relationships first, and you build that comfort and safety and trust."*

*"I think a lot of it has to do with actual relationship with the teachers that I'm coaching. Then the other piece is actually having time. This year, we have facilitated planning time, so it's a lot easier to go in depth into a lot of these follow-up conversations related to the work. It's not necessarily an outside curriculum source, it's not the Provider. But I think that honestly, it's the relationship, and trust built with the teacher, and having the time to actually get the work done."*

**Coaches also pointed to the benefits of teachers learning together** (e.g., walk-throughs), because it provides opportunities for teachers to take risks and celebrate successes together.

*"When the teachers are given the opportunity to do what we do when we go to other schools, to give them the opportunity to get into other classrooms where it's working well and they can see the instructional routines or are things really working for the students, they can see the discourse happening and then they can go back and try it with their students. Because a lot of times reading it from the manual where it may give you a description of what to do with one thing but seeing it in action is really what helps the teachers be able to take it to the next level. And then what's even more powerful is when it's happening in your own building, and they can go down the hall and see it happen with their own students. I think that's really when we're able to really maximize the curriculum."*

Learning also requires time, so **support for teachers necessitates providing them consistent time to learn the new curriculum in non-threatening environments.**

*"I think there needs to be pretty consistent coaching. I think the most difficult thing in this role is I see my teachers once every two weeks, right? And I think you get the most traction when you're seeing your teachers at least on a weekly or multiple times a week, especially for a teacher who's new to the curriculum."*

*"I think probably when I think about the work that I do directly with teachers that is most translating to student experiences and student learning, I think, it's co-planning. Everybody else mentioned that too, but just the time sitting down and looking at a lesson and co-planning a specific lesson each week I think has really helped shape newer teachers, especially their planning habits and the mindset they have while planning. That has made some more lasting impacts, I think."*

## Implementation - Barriers

**A major barrier identified by Coaches that negatively affects implementation is lack of time – for them to coach teachers, for teachers to learn and practice the curriculum, and then for students to engage in learning via "productive struggle."** As multiple Coaches commented, they are not provided enough time with teachers to engage them in meaningful reflection of their practices, whether because of lack of

time built into teachers' schedules or interruptions to teachers' work days.

> *"Not having enough time to actually dig into the curriculum, the program, because most often after activity one, time is up. So, we really don't get a chance to get into the student practice of it, which is what we need."*

> *"Well, I was going to agree with the issue of just finding the time for students to practice those problems. And I think that might just be due to our scheduling, but our students don't get the time to actually apply the learning to do the practice problems."*

**Another barrier Coaches reported was lack of teacher buy-in, often due to competing priorities or "program fatigue."** Multiple Coaches noted that they were more likely to encounter this mindset among veteran teachers who have seen programs and curriculums come and go.

> *"So, for me at my school, I think it's more of teacher buy-in with implementation, we're still having a struggle of why we got to do this. It's year two. We shouldn't still feel that way. Even if we do, it shouldn't be obvious. So, I think that's a challenge, getting over that…"*

> *"Program fatigue, where sometimes people feel like, "Oh, how much should I invest into this, because it's going to be something new in two years or next year?" So, there's this hesitance towards really, really giving it their all. So, I get resistance from some of the teachers and it's mainly the veteran teachers that I feel like they think this is going to come and go, so why invest? … That for me, honestly, has been the biggest obstacle."*

**Coaches also noted that teacher turnover was a huge challenge resulting in Coaches juggling training at sites or in districts where turnover is high.** Some Coaches shared that each year they work with a number of teachers that are new to the curriculum and/or school, district, and teaching. This makes their job harder as they have to bring new teachers up to speed in the curriculum while advancing veteran teachers along the curriculum. In addition, some of the Coaches are working with uncertified long-term substitutes and may have very little, if any, math or teaching background.

> *"Just teacher turnover…We have almost all the teachers that are participating in this work this year new to it this year. So even though it's been over the course of three or four years."*

> *"A lot of vacancies this coming school year, and then I have to start Amplify all over again with the new people, and I'm like, "Oh my god." So that's a huge barrier because now I have to keep starting all over with tier one. Yeah."*

Some Coaches also commented that **teachers' lack of math content knowledge was a barrier as it made it harder for teachers to understand and thus adopt the curriculum with fidelity.** When one considers this along with the lack of time available to teachers and Coaches to work together and that this grant is only for three years, it will be hard for some teachers to effectively implement this curriculum and reduce gaps in student achievement.

*"I don't think this is the same thing, but I think it's the content expertise of our teachers. Some of them are not certified in mathematics, they're certified either generalist or, which is kind of, so some of us have a math degree and studied all the theoretical mathematics and all that. And some just went through EC certification. So, some of them lack that content knowledge or to get, and Carnegie is very rich in that conceptual understanding and making those connections. So, I also feel like sometimes the reason it may not be getting clear to the students is because some of our teachers themselves may not have that content rich knowledge."*

*"I would say almost a hundred percent of the teachers who struggle with strong implementation don't really understand the curriculum or the content very well, and that's seen through their planning, their execution."*

**Somewhat related is that some site administrators lack more than surface knowledge of the initiative or curriculum and thus do not fully support implementation.**

*"But I was going to say another gap… is making sure admin understands Amplify and what they're looking for, and when they go into the rooms, what is supposed to happen. That's a big gap too because I don't feel like they can give the best feedback or help because we can't get to every single person because it's one of us. And if they could help with the weight, like hey, that is not... I know the kids are sitting down, but they're not delivering the curriculum correctly. And I know we've tried as a district, but I've known none of our admin people have ever gone to anything. So, with that being said, if we can push on them more to attend training, but they're all unexperienced."*

**Many Coaches were concerned that plans are not yet in place for when the grant ends. This is a barrier, especially for Coaches where lack of planning is still an issue.**

*"Because we're thinking about what it looks like to off-board, us figuring out how to hand things over to them and to figure out what's important to them so that we can use this last year really producing and providing a service that makes their teachers better for kids. And right now, I don't think I can land on... We don't know what we're going to be doing next year. And I just think planning is important. And I think what we plan now is what's going to work best."*

Other **Coaches questioned the sustainability of this work as more teachers were added with different cohorts at different places in their engagement in and understanding of the curriculum. Teacher turnover was also noted as a concern regarding sustainability.**

*"So, I think just the dynamics of me being there to set up everything and have three different cohorts of 30 different buildings, and just the logistical things will be very time-consuming."*

*"There's going to be a lot of schools that are involved after... We're already at 20, and then next year we're adding on another 10. And everybody's going to be at different points."*

**Coaches also worried that support might dwindle if districts question the payoff from the investments that have been made to date.**

> "Well, I anticipate that the payoff issue may continue to be a barrier. Schools are at different places in the implementation. Some are in year one, some have been using it for three years. And so, I anticipate that if they do not see public facing data increase, then they will be less likely to want to continue with using the curriculum with integrity. Sorry, I'm anticipating people looking for quick results versus investing long term practices."

## Supports Received

**Coaches noted that they received support from a variety of people and organizations, with some receiving support from their districts, others from the Provider, and some from both.** Support from districts often included time for communication, collaboration, and problem-solving, and in some cases multiple departments or people provided support to Coaches.

> "In terms of the district, I wouldn't say I get too much support from them. I think it's more like time to collaborate and align on what they're seeing, what I'm seeing, so we can address it in a uniform manner. But I wouldn't say I have too many touchpoints with the district itself. The district leaders, I have obviously a lot of touch points with the district teachers and school leaders, but not the superintendent."

> "I don't receive any support from the district. All of my support comes from leading educators, and that's from my manager. He'll give me feedback on the internalization sessions that I've created, and he also watches my coaching conversations, one a week, and gives me feedback so that I can implement it in the next coaching conversation that I have with that identified person."

**Other support comes from the curriculum developers**. Coaches frequently meet with curriculum specialists to discuss coaching strategies, data findings, etc.

> "I receive quite a bit of support from [Provider]. I have a program manager, and she has weekly meetings with me one-on-one as well as content building meetings with me every two weeks, and this is where we break down upcoming units that I'm going to unpack with the teachers."

> "I think we receive support from Pivot when they come into our buildings. My school started last year as year one school and this year's our second year. So, every time they come just helping us perfect our problem of practice and make sure that that's still what we want it to be."

### *Effectiveness of Supports Received*

Coaches were asked to rate the effectiveness of the support that they received in terms of supporting their preparedness and efficacy in their role on a scale of 1-5 (i.e., 1 = low and 5 = high). **Coaches provided higher ratings to supports they perceived as helping them facilitate teachers' learning in a timely manner and lower ratings to supports that were not personalized or individualized, or**

**non-specific.**

> "I would give her a five as well. But with that being said, she's a great sounding board when I feel like things are just not going right for me as a coach, and what I'm trying to convey to the teachers. Additionally, I wanted to say the unique thing is she came to my school. She did some classroom walk-throughs with us, and I was telling her something I was trying to work with the teachers, and she had a... I'm actually using a PD that she created. And so just having that same ANet coach and being able to talk to my colleagues with issues that I'm having that I'm trying to address, and being able to get that support and resource in the moment is great. And being able to reach out to other instructional Coaches in our district to get support."

> "I think that he gives feedback that is very targeted and allows you to know exactly what needs to happen and also engages you in a conversation around that so that you feel invested in it."

Some Coaches also **rated a support as more valuable when they trusted whoever was providing the support and could share their needs or concerns with that supporter.**

> "I think NTNs been extremely effective and very, very helpful for us. But I think a key piece of that is we've had the same coach for years now, and so she knows our school, she knows our teachers and they're very comfortable coming to PLC and sharing and talking because she's created that safe space. And so not only does she able to stretch and push us, but there's this atmosphere that's created where teachers can come and just be honest about what's happening in the classroom, and they don't feel when she comes into the classroom to observe that they don't change anything. They're just who they are because they know that's the relationship that's been established."

**They rated the value of the support lower when messaging and goals remained unclear.**

> "I feel like we have made some progress with the leaders, and we have gotten to get them more engaged this year than they previously were maybe last year. I still feel like, though, it comes in fits and fits and starts. Sometimes it's really good and seems like things are moving forward and then all of a sudden it stops, or I don't know if there's a change in plans where they don't really know what the plan is. So, it's kind of hard to get some traction going and maintain some momentum."

> "There's some sessions that are more effective than others, and I think it's... When we have goals that we know we're working to, but we're going in with a lens of like, "Let's see what we see", it's hard to make the connection about what our natural next steps need to be towards our goal when we might not have had an opportunity to see our goal. So, I've had walks which are really effective where we saw what we needed to or didn't see what we needed to, and the opportunities were provided for it. And walks where there was not going to be an opportunity to see what we needed. So, I'd agree with that three."

In addition to supports received, **Coaches wanted more direct support from managers or developers including opportunities for coaching practice, professional development, and increased access to resources or training to support their understanding of the specific curriculum**.

> *"When it comes to support, expertise is important. We're implementing a new curriculum and having expertise in that specified area is important because we all are trying to learn this. And so, to know what it should look like and when it is effective, because I think this just feels different than what we're used to in terms of how students are taught and how they learn. So, I think expertise is important as far as support, putting our trust in somebody that this process works. So, I think that helps as well."*

> *"So, I know that upcoming, I'm going to have Amplify representative come over to be one-to-one with the teachers and do hip-to-hip coaching. I think having that process earlier on would've been beneficial and not just now we're March. So having that more consistently and earlier on would definitely be beneficial."*

**The other major area of support desired by Coaches was increased administrator and district engagement and communication.** Coaches want district- and building-level administrators invested in the work; knowledgeable of the process, goals, etc.; and supportive of Coaches' efforts as evidenced by providing informed feedback.

> *"The weaknesses are, for me, all of those strengths are with the district and the specialists, the strategists and the teachers, and the communication with the building administrators has been less engaging. And I think it might be because they're not really part of that structure. The building administrators aren't there on those five days of PD. They don't know what happens on those five days of PD. And when we come for walk-throughs, it's a little hit or miss whether or not we get to communicate with them, and they feel like this thing is probably being done outside of them. They trust enough they don't feel like they're needed and so they don't see much of their role in it. So, I would say the weaknesses are communication with the building administrators."*

> *"I think more feedback from [the district], not just, "Oh, that works," or "That looks good," or, "Can you change it?" But being very specific about what their outcome is and what they want to see us working towards. Or if they don't want to do that, be okay with loosening the reins a little bit and letting us be free to make those decisions. Everything seems to be reactive, not proactive…Right now, it seems very disjointed."*

# Data

Coaches reported utilizing multiple data points from a variety of sources for various coaching roles. **To assess Coaches' understanding and implementation of the curriculum, most Coaches shared that they triangulate data from multiple collection points and sources to ensure the reliability of their findings.**

They frequently use these findings to plan professional development, professional learning community activities, etc.

> *"So, for each topic, we do a variety of different data points. One is, we have people do an exit ticket at the end of PD. PD is two days. So, the first day they do their survey, and we look at it, make adjustments in real time for that next day. Then, we put it into a chart that says, "These are the six or seven criteria that we're looking for." Then, we tier people. And then, we target our support based upon that data and based upon qualitative data from their coaching sessions. Also, we use something called a teacher knowledge assessment, TKA. And that's the teachers that use the curriculum, what can they recall and implement on paper? Not what happens in their classroom. And then the next thing we do to triangulate all of that is, we do classroom observation data to see if what we talked about in the curriculum is actually happening inside of the classroom. And we're always looking at those three pieces of information to see what are the adjustments and changes that we need to make at a structure level, and goals, and also what I can do as a coach to better support people and move them along the continuum."*

When working with administrators or other district personnel, **multiple Coaches reported using observational data or "usage data" gathered via walkthroughs (often done in concert with school administrators and sometimes with other Coaches or teachers) to gauge fidelity of implementation of the curriculum.**

> *"We've used usage data, not with teachers, but with district administration, to talk to them about where are teachers using it, where are their strengths and weaknesses there, investigating possible reasons for certain places where there might be more or less usage."*

> *"For two years now, we've had a walk-through protocol. It's like a series of, first question, are teachers using Agile Mind? If so, continue on with the survey. And very nicely, pretty much every class are using Agile Mind, so it makes it a little bit easier to get to the next few questions. But it's just questions about discourse or about classroom environment. We have our own observation guide with Agile Mind that we use, and we made it into an electronic form so that teachers and school leaders and administrators can use it pretty quickly with us."*

**Student data is another source of information Coaches use to assess teacher practice and student understanding and learning.** This data may include student test results, student work products, student exit ticket or survey results, as well as observations of students working.

> *"I have also looked at student performance data related to exit tickets or cool downs, also looking at their interim assessment data that they do districtwide or citywide…To make changes, oh, so that, the data, specifically the immediate end of lesson data informs whether or not the coaching moves and the teacher moves were successful and getting students to produce the outcomes that we are looking for. The interim assessment data is a longer view of progress, so that has been looking more*

*maybe over the course of a coaching cycle, how the practices that teachers have put in place through coaching have affected student performance."*

*"I can say that when co-planning with our co-teachers and when we're doing lesson studies and working with other teachers in different capacities, we oftentimes look at student work and use that as data to make informed decisions for next steps or what supports to put in place for next steps. So, I know exit tickets are a popular one. Of course, their summative assessments are helpful too."*

**Other data sources may be more informal,** such as observing teachers' engagement in learning, professional development, etc. or by asking for feedback from colleagues, Coaches, or others whom they trust will provide their honest assessment of how activities were perceived or what they believe teachers learned.

*"I think no matter what component you are in any situation you are looking for data, even on our Saturday PD is just watching people's facial expressions, listening to what they're saying, that's collecting data. I think that that's actually probably our most powerful data in what leads our next steps in our work, because if they're not truly engaged, then it's not going down to the students. And hearing their aha moments tell you, oh my gosh, that was totally worth it. We got somewhere with that. Let's move to the next step."*

## Data Quality and Utility

**Coaches frequently consider data as not usable due to the format of results or because the results are too broad-based and do not drill down to the level Coaches can use to identify next steps in coaching.**

*"My experience has been horrific with it, because as XXX said, it's not user-friendly. And from an administrator standpoint, you can't see certain data until a teacher completes their end. And it's just been so much work on the ground trying to figure out who has done it, who has not, in order to even make a decision about instructional practices."*

**Coaches frequently disregard data where they question the validity or reliability of findings when deciding next steps for working with their Coaches**. Based on their comments this appears to be an issue with student assessment data due to students' fatigue around testing and lack of willingness to try their hardest on all tests.

*"Then also, I think some students can... I see a small group of students, they have used the curriculum enough and they know that there's a particular way that the lesson was formatted, so they just easily guess the right answer and move on. Yeah. I think that's the part that I feel like if there's a way that we can address that, that would be great."*

*"Because many of our data that we use here, when we compare it, we might notice, they did good this time and it's the same test. And the second time that they took it and was lower, then what's going on? Because we have to look at that student*

*engagement. Are the kids actually taking this serious because it's not a grade for them?"*

**Coaches reported that data gathered from reviewing student products, conducting walk-throughs, and observing students' engagement had the greatest utility for assessing teachers' and students' use and understanding of the curriculum and content.**

> *"I think for us would be more so the learning walks that we do. We get a lot more data from that as far as how are the teachers implementing the curriculum, how the students are responding, looking at that productive struggle and then determining which teachers need support in which areas?"*

> *"I think the observational data is probably the most impactful. I think the big picture i-Ready diagnostic data is the least in terms if I had to rate them, but it's not that it's not helpful either in terms of big picture goal setting."*

**Based on comments, most Coaches try to collect student-level data that is a) most aligned to what they have covered in their coaching with teachers, and b) captured soon after the teacher has taught that concept.**

> *"Also, I think exit tickets are probably the most impactful sources of data just because they're day-to-day and they're demonstration of what kids have mastered each day. But that being said, the actual exit ticket questions provided within the curriculum lesson are not always... We use them as part of the practice."*

> *"So, we use a lot of biweekly common assessment data so that it's not us waiting until the end of the unit to see what students, what they understood and what they didn't understand. So, using our biweekly common assessment data to then go back and say, okay, these students need to work on this standard a little bit more so really utilizing our data to go back so that we don't wait until the end and students are still confused."*

## Data Needs

**Coaches had very mixed opinions as to what data they needed.** For some it was assessment data disaggregated by subgroups of students, whereas for others it was additional student test data to supplement end- and mid-year assessment data. Another coach wanted teacher content knowledge and others wanted more data about teacher practices. **For many, it appears they are seeking data that can show the causal impact of the work they are doing with teachers on students' subject knowledge/achievement/performance.**

> *"Oh, I mean, ultimately, we want to see if what we're doing is impacting student performance. So, finding if we can find a direct link between what we do and student performance, that would be ideal."*

> *"It might be interesting to see actual alignment data so that the state test questions data from them, from students taking them in conjunction with units that they have experienced, and then looking at their end of unit data to see maybe if there is*

*alignment between their performance or end of unit data, specifically from the curriculum as well as state test questions aligned with the unit to see if there is a connection or a disconnect between the way the questions present themselves to kids, meaning they could possibly do these things in the unit, but when they are seen in a different format, there's no transference."*

However, **most Coaches noted that there is much data available to them with some noting that more data is not needed – just time to make use of it all.**

*"I think we have enough data. I wouldn't suggest any more. I can't think of something that I really would need to see. I think what what's provided already is pretty sufficient."*

*"We have so much data that I think we're like, we don't want one more piece of data because it becomes a lot. We are constantly, I feel like testing, testing, testing, get ready for the next test you guys. Oh my gosh, another test is coming up. Next week we're testing. It feels like that sometimes. And that just... I don't know, I don't know that too much data... I don't know that there can be too much data, but sometimes it feels like there is. And then it's like, well, which piece of data do we look at? Which piece is best? What makes this better than that? So, in my opinion, I think we're good on data."*

### Data Not Used

When asked what data sources they tended not to use, **many Coaches reported not using assessment data. Reasons for this depended on the type of data they received from such assessments.** For example, in some cases, the data are meaningless as they provide only a score for how a student performed but do not allow for further investigation of what areas they did well in and in what areas they struggled. This appeared to be a common issue with assessments created by the curriculum developers.

*"When we asked for standard analysis reports from Great Minds, and they just gave us that ugly spreadsheet that had every single standard from K through high school. It was basically check marks. And to try to filter through that and make sense of it was just ridiculous. And so, they've done something better now with standard performance, but even with the standard performance, I need a little bit of a deeper dive with it."*

*"End of module assessments for Eureka, because it doesn't tell you much. It doesn't tell me much. It doesn't change how I support somebody as a facilitator. So, to spend a lot of time looking at that type of data point is just hard because there are so many things that go into students performing well on any type of assessment of that nature."*

**Coaches also noted that testing cultures varied greatly across schools and affected how reliable data were.** For example, Coaches questioned the reliability and usability of data when there was evidence that students were guessing on answers, or not all students took the assessment on the same day, or

some finished tests in unrealistic amounts of time.

> *"I would say the Renaissance data, sorry, because again, not all students took it the same day. You could say many of them finished in five minutes instead of the 30 minutes that they were given. So, we decided not to use that data and so I could use that for my coaching sessions because it's not, sorry, but it's not there. I mean, many of the kids do take it serious, but then there's others that don't and that's going to mess up the data."*

> *"I will say that I believe testing fatigue is real and we give them a lot of different assessments, and we always say, this one's important. Really take your time on this one. We're really going to be looking at this one. But when you hear that for every single thing that you're doing, sometimes that just becomes, okay, whatever. She said this before, and I don't see how it's important in my life sometimes."*

## Data Collection and Sharing

For Coaches, as shown above, **data collection is ongoing** – from teacher or student surveys, exit tickets, rubrics, observational forms, and assessments to informal conversations, observations, and check-ins. **For most, collecting the data is fairly easy, whether through Google forms or a formal assessment, notating rubrics, etc. It's harder to find the time to analyze the data in meaningful ways and then share it in a timely manner.**

> *"I think collecting student work is very feasible, looking at student data is feasible, and having feedback from teachers every now and then is reasonable. And if you build out a time to analyze it in a routine, I think it's very helpful. I think at times, it's not feasible when there's many, many pieces of data happening at one time instead of being spaced out, I guess, more strategically. So at one point, you'll have eight pieces of data that you wouldn't be able to look at that time. And so, that's not helpful, and it becomes a very compliance, procedural type of thing. I think it's also really helpful to understand why we're collecting certain pieces of data and how to implement it, because sometimes I also feel like I'm asked to collect data, but not really explain why or how it's going to be used or how it's going to help the folks that I coach, right? That's when it starts feeling very compliancy."*

Coaches recognize the need to be transparent about the data they collect while at the same time supporting individuals' privacy rights (as these data are meant to be non-evaluative) and also provide meaningful and timely analyses of the data. **While many store data on Box folders or Google drives, the successful use of these data for planning or sharing with administrators varies.**

> *"I would say my biggest challenge is just teachers depending on me to give them the data and them not wanting to truly know how to go and find the data themselves, but really working on getting them to be able to find it on their own, knowing that we won't always be in the same positions and they need to be able to find the data themselves so it's not, when I meet with you it's the first time you've seen the data, but you pull your data, take that initiative to pull your data, and then you come find*

*me and say, "Hey, I want to talk about this data point."*

# Appendix A: Participant Demographics

*Table 1.* Description of Provider Role (N=19)

| Provider Role | % |
|---|:---:|
| Associate/Senior Director | 52 |
| Instructional Leadership | 5 |
| Manager | 21 |
| Math Fellow | 11 |
| Professional Development Provider | 11 |

*Table 2.* Provider Demographics (N=19)

| Provider Demographics | % |
|---|:---:|
| 20 years or more in profession | 37 |
| 5 years or more in current role | 16 |
| Female<br>Male<br>Non-binary* | 68<br>16<br>11 |
| Hispanic | 11 |
| Asian<br>Black<br>White<br>Other* | 11<br>11<br>68<br>5 |
| Bachelor's degree<br>Master's degree<br>Doctorate* | 5<br>74<br>16 |

*Note:* percentages do not equal 100 due to missing data.

Table 3. Description of Executive Sponsor Role (N=15)

| Executive Sponsor Role | % |
|---|---|
| Assistant/Associate/Deputy Superintendent | 53 |
| Executive/Senior Director | 40 |
| Principal Supervisor | 7 |

Table 4. Executive Sponsor Demographics (N=15)

| Executive Sponsor Demographics | % |
|---|---|
| 20 years or more in profession | 87 |
| 5 years or more in role | 20 |
| Female | 20 |
| Male | 80 |
| Hispanic | 27 |
| Asian | 7 |
| Black | 13 |
| White | 80 |
| Master's degree | 33 |
| Doctorate | 66 |

Table 5. Description of Coach Role (N=35)

| Coach Role | % |
| --- | --- |
| Advisor | 3 |
| Coach | 37 |
| Curriculum Implementation Specialist | 29 |
| District Support | 14 |
| Lead Designer | 3 |
| Participant | 3 |
| Teacher | 3 |
| Missing | 8 |

Table 6. Coach Demographics (N=35)

| Coach Demographics | % |
| --- | --- |
| 20 years or more in profession | 51 |
| 5 years or more in role | 29 |
| Female | 86 |
| Male | 14 |
| Hispanic | 9 |
| Asian | 11 |
| Black | 17 |
| Multi-racial | 3 |
| White | 57 |
| Other | 3 |
| Bachelor's degree | 9 |
| Master's degree | 86 |
| Doctorate* | 6 |

Note: percentages do not equal 100 due to rounding.

# Appendix B: Provider Interview Protocol

(Team Functioning and cultivating Executive Sponsor)
1. What has your experience been with the District Team? What has seemed to work well? What could be improved on?

2. How would you describe your relationship with the LEA Executive Sponsor?
   a. Probe: What are strengths?
   b. Probe: What are opportunities for improvement?

3. How have you supported LEA leadership to champion implementation (i.e., engage in problem-solving; facilitate decision-making)? What might be areas for growth?

(Communication)
4. What are successes and challenges in your communication with different stakeholder groups (i.e., school or district staff, families, community)?

(Fit and Feasibility)
5. What processes are you and your partner LEAs using to ensure fit of the curriculum?

6. What processes are you and your partner LEAs using to ensure feasibility of the curriculum?

(Implementation Plan)
7. In the past year, how have you and your partner LEA worked together to make adjustments to your implementation plan and to your implementation strategies? *(please probe if necessary to capture any other changes to implementation strategies).*

(Supports Provided)
8. What supports do you provide to your partner LEA(s) to help with implementation? How do you tailor those supports to the specific LEA's context?

(Sustainability)
9. How have you and your partner LEA(s) planned for continuing the implementation support/activities included in the implementation plan beyond the 3 years of this grant?

(LQ M.4)
10. What do you think are the factors that maximize the successful implementation of the math curriculum? How did you come to identify those factors? *(i.e., How did they come to recognize or realize it? Who, if anyone, brought it to their attention? What made them first think this was an important factor that was helping?)*

11. What barriers have you or your LEA encountered so far that hinder the successful implementation of the math curriculum? How did you come to identify those barriers? *(i.e., How*

*did they come to recognize or realize it? Who, if anyone, brought it to their attention? What made them first think this was an important barrier?)*
   a. Probe: What barriers do you anticipate encountering in the future?

(LQ M.3)
   12. Tell us about how you are using data to support implementation.
       a. What data do you find more helpful or useful?
       b. What available data are you not using and not finding helpful?
       c. What data do you wish you had, but don't have?
   13. How do you collect or share data (with the DIT, with Coaches, with staff, with the Executive Sponsor)?
       a. Probe: What have you found feasible and where are you running into challenges?

<u>Closing</u>
Before wrapping up our interview, is there anything additional that I missed or you would like to add related to the BMGF Effective Implementation Cohort project?

# Appendix C: Executive Sponsor Interview Protocol

(District Teaming)
1. What has your experience been with the District Team? What has seemed to work well? What could be improved on?

2. How would you describe your relationship with [Provider]?
   a. Probe: What are strengths?
   b. Probe: What are opportunities for improvement?

(Supports Received)
3. What supports do you and your LEA currently receive and from whom? How effective do you find those supports to be?

(Implementation Planning)
4. In the past year, how have you and your Provider worked together to make adjustments to your implementation plan and to your implementation strategies to fit your district? *(please probe if necessary to capture any other changes to implementation strategies).*

(Executive Sponsor)
5. How have you as the Executive Sponsor championed the implementation of the high-quality mathematics curriculum? Are there activities you found more impactful than others?
   a. Probe: How has your Provider supported you in championing this work?

(Communication)
6. What are successes and challenges in your communication with different stakeholder groups (i.e., school or district staff, families, community)?

(Fit and Feasibility)
7. What processes are you and your Provider using to ensure fit of the curriculum for your students and staff?

8. What processes are you and your Provider using to ensure feasibility of the curriculum?

(Sustainability)
9. How is your LEA building capacity to sustain supports (e.g., creating sustainable implementation teams and professional learning/coaching systems) for the high-quality mathematics curriculum after the grant ends?

(LQ M.4)
10. What do you think are the factors that maximize the successful implementation of the math curriculum? How did you come to identify those factors? *(i.e., How did they come to recognize*

*it? Who, if anyone, brought it to their attention? What made them first think this was an important factor that was helping?)*

(LQ M.4)

11. What barriers have you or your LEA encountered so far that hinder the successful implementation of the math curriculum? How did you come to identify those barriers? *(i.e., How did they come to recognize it? Who, if anyone, brought it to their attention? What made them first think this was an important barrier?)*
    a. Probe: What barriers do you anticipate encountering in the future?

(LQ M.3)

12. Tell us about how you are using data to support implementation.
    a. What data do you find more helpful or useful?
    b. What available data are you not using and not finding helpful?
    c. What data do you wish you had, but don't have?

13. How do you collect or share data (with the DIT, with Coaches, with staff, with the Provider)?
    a. Probe: What have you found feasible and where are you running into challenges?

Closing

Before wrapping up our interview, is there anything additional that I missed or you would like to add related to the BMGF Effective Implementation Cohort project?

# Appendix D: Coaching Listening Session Protocol

(Implementation Strategies and Supports: Provider-provided supports)
1. Who do you coach and what coaching strategies are you using to support effective use of the mathematics curriculum?
    a. Probe (based on the identified level (who) of coaching): What supports do you provide to classroom teachers? Coaches? Leaders (district or school)?

2. What kinds of support do you currently receive and from whom (i.e., district staff or Provider)?
    a. Probe: On a scale of 1 to 5 (1 being least effective and 5 being most effective), how effective are the supports you receive as a coach? What factors played into your rating?

3. What kinds of support do you need to be an effective coach?
    a. Probe: Are there any additional supports that you are not receiving that you think would be helpful?

(Bi-directional communication - specific implementation support)
4. On your math implementation work, how well does communication work with the staff you are coaching?
    a. Probe: What are successes?
    b. Probe: What are challenges?

(LQ M.4)
5. In thinking about your experience as a coach, what do you think are the factors that maximize the successful implementation of the math curriculum? How did you come to identify those factors? *(i.e., How did they come to recognize it or realize it? Who, if anyone, brought it to their attention? What made them first think this was an important factor that was helping?)*

(LQ M.4)
6. What barriers have you encountered so far that hinder the successful implementation of the math curriculum? How did you come to identify those barriers? *(i.e., How did they come to recognize it or realize it? Who, if anyone, brought it to their attention? What made them first think this was an important barrier?)*
    a. Probe: What barriers do you anticipate encountering in the future?

(LQ M.3 - *focus on Coaches' own use of data; if there is extra time or if they do not use data themselves but reference others' use of data, can ask Q8 about knowledge of others' use of data, e.g., DIT*)
7. We have a lot of questions about the use of data or measures; before we go down that path, we need to know whether you use data related to the math curriculum or its implementation, yes or no?
    a. IF YES - Q8 - Q11
    b. IF NO - Q9 - Q11 (skip Q8)

8. What types of data or measures are you using? What has your experience been with this data? How do you use the data?
   a. Probe: What has been your experience with using the data to make changes in your practices?
   b. Probe: Why is it that you use those types of data?
   c. Probe: Do you find this data reliable and accurate? Is it useful to you?

9. Can you tell me about any times you had data available and chose not to use it? Why?

10. What other types of data might be useful to you that you would like to see?

11. How do you collect or share data? What has been your experience related to collecting and sharing data? If you do not, why not?
   a. Probe: What have you found feasible and where are you running into challenges?

Closing
[If necessary] As we come to the end of our session today I would like to revisit some of the questions we put in the parking lot. [Review any questions or issues that came up during the session]

Before wrapping up our listening session, is there anything additional that I missed or you would like to add related to the BMGF Effective Implementation Cohort project?