

Scaling Curriculum Based Professional Learning

Research & Learning Plan March 10, 2025

Prepared for The Gates Foundation

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1. Background

The vision of the Gates Foundation's K–12 education program is that all students graduate high school with the mathematical skills they need to be successful in higher education, workforce, and life. The Foundation's goal is to ensure that priority students¹ in focus states² and nationally master Algebra 1 by the end of ninth grade and transition to higher math courses in high school and beyond. The Foundation works toward that goal by (1) improving the quality of instructional materials and related educator supports and (2) supporting the effective use of high-quality instructional materials.

Research on effective professional learning (PL) designed to support the implementation of high-quality instructional materials (HQIM) illustrates positive impacts on instructional practices and student learning. In their review of PL research, Hill and Papay (2022) summarize that both the substantive contributions to educator knowledge (its content, "the what") and the delivery of PL (its format, "the how") maximize PL effectiveness. PL is most productive when it: (1) supports educators to build subject-specific instructional practices; (2) focuses on distinct curricula or formative assessments; and (3) provides practical recommendations/support for teachers' relationships with students. In terms of format, PL is most effective when it: (1) builds in time for teacher-to-teacher collaboration; (2) offers one-to-one coaching, where coaches observe teachers in action and provide direct feedback; and (3) includes follow-up meetings to respond to teachers' inquiries and continuous support needs.

Problem Statement

Despite curriculum developers producing HQIM and PL providers offering quality services and supports, local and state education agencies struggle to access HQIM supported by aligned and job-embedded PL at scale. The Foundation identified the following barriers to scaling HQIM-based PL:

 Scaling PL services has proven challenging. Traditional formats demand substantial human resources, particularly because the ratio of teachers to coaches is inversely related to the positive effect of coaching (Kraft et al., 2018). The ability to expand high-quality services is constrained by the availability of experts and the high cost of acquiring their expertise (Brookings, 2020), as well as the limited flexibility within school districts to allocate funding, time, and support for teachers to attend during the school day. Additionally, scaling is hindered by the need for continuous support after initial learning sessions to

¹ "Priority students" are defined as students who are Black, Latino, and/or low income.

² California, Florida, New York, and Texas are the "focus states" of the Gates K-12 program. Within those states, the Foundation has identified focus regions.

ensure that teachers have the tools necessary to maintain effective implementation and track student progress over time.

- For-profit publishers have limited incentives to invest in job-embedded coaching and teacher collaboration. Scaling the PL components proven most effective by research, such as instructional coaching and collaborative teacher time focused on curriculum and student work (Darling-Hammond et al., 2017), requires significant upfront investment with uncertain returns. When these companies do allocate resources to PL, they typically focus on experiences that directly support product adoption and early customer success, such as product demos and large-scale trainings. Although these experiences have value, they are not always closely linked to improved student outcomes (World Bank, 2018). The combination of low financial return on investment for the most impactful PL components and the challenges of scaling them limits publishers' willingness to invest in robust PL offerings that can independently ensure high quality.
- There are no clear indicators of quality to help guide the selection of PL providers. Over 25 years of research have consistently shown the importance of PL in enhancing instruction and implementing curriculum, yet this research has not been translated into actionable insights for practitioners. The gap between understanding what works in PL and its implementation in districts and schools remains. As a result, more than 90% of administrators responsible for curriculum and service selection report relying more on peer recommendations and word of mouth than on third-party evaluations of product quality or evidence of effectiveness (The Decision Lab, 2022).

The Scaling Curriculum Based Professional Learning Project

To increase the number of educators supported by HQIM-based PL, the Gates Foundation has developed and funded the Scaling Curriculum Based Professional Learning Project (hereafter referred to as Scaling CBPL). The project supports the development of strategic business partnerships between publishers of mathematics curricula and PL organizations. The project hypothesizes that by combining resources, expertise, customer relationships, and technology, publishers and PL providers can create and scale aligned curricula products and services that can be implemented widely across different regions or educational systems, reaching a larger audience of educators and students.

The first phase of the project, occurring from October 2024 through May 2025, involves supporting four publisher organizations and 13 PL service provider organizations in exploring potential partnerships through relationship building, needs sensing, and identifying areas of growth and cohesion.³ When publishers and PL providers agree to partner, they establish partnership agreements around revenue sharing, licensing, data sharing and intellectual property (IP) management and develop a formal business strategy for the partnership (i.e., a Go-to-Market plan).

The Scaling CBPL anticipates that during this partnership development phase of the project, formal partnerships will form among publishers and PL providers within three general typologies: (1) sharing potential customer (i.e., Local Education Agency [LEA]) leads, (2) cross-marketing and cross-selling each other's products and services, and (3) co-marketing and co-selling bundled offerings. The project defines bundled offerings as a co-branded package or solution of PL services and products offered in a single combined unit for the district to purchase from the partnership. The Foundation considers the co-marketing co-selling bundled offering partnership type to be the ideal based on the hypotheses that it will (1) increase coherence of implementation supports and instruction within schools and classrooms and (2) it will ease the district procurement process (e.g., eligibility for multiple funding streams).

The next phase of the project, occurring from June 2025 to June 2028, focuses on pilot testing the partnerships, including monitoring how they are functioning and their marketing and sales approaches within the focal states. A primary learning question to be examined is how publisher–PL provider partnerships contribute to increased reach of HQIM-based PL. The project defines reach as the expansion of partners' LEA customer base in key focus states, and specifically in LEAs that serve a high proportion of priority students (i.e., at least 50% of students in the district are Black, Latino, and/or at

³ Prior to the start of this project, the Foundation requested information from publisher and PL–provider organizations about their products and services, which the Foundation used to select organizations to invite to join this project, and from which initial potential PL provider–publisher pairings were identified.

least 50% are low income). In other words, the HQIM with aligned PL occurs in (i.e., is adopted and purchased by) more districts.

The pilot phase of the project will also involve a deeper exploration of the third type of partnership, those co-marketing/selling bundled offerings.⁴ The primary learning questions (LQs) for these partnerships include understanding educators' experience with and perceptions of the bundled offerings, and how bundled offerings impact the local procurement process and decision-making for purchasing. Ongoing data will be collected for continuous improvement and to inform the project's learning agenda and field-building activities. As is described in greater detail in <u>Section 5</u>, the pilot testing will occur within an exploratory study design yielding descriptive findings and illustrative case studies suggesting promising areas of potential impact about a range of factors among partnerships **without allowing for causal conclusions**.

RTI International serves as the Foundation's grantee of record for this project and comprises two teams: an intermediary team and a research team. The RTI intermediary team leads the operationalization of the investment vision, supports the complex publisher–PL provider partnership (including setting up and administering subcontracts to participating organizations), analyzes data for actionable insights, identifies and addresses IP and data sharing concerns, and conducts strategic reporting and dissemination. The RTI research team leads the execution of the learning agenda, including collecting needed data from the partner organizations and districts, analyzing those data, and producing reports and learning products. Robert Sheffield of Scaleup Partners serves as a key advisor for the project. Scaleup Partners provides consultation and supports the development of partnerships to help ensure development of a successful foundational business agreements.

To support objectivity and independence between the two RTI teams, several strategies are deployed to create a firewall, defined as a set of organizational boundaries and processes to minimize conflict and unintentional information sharing. These strategies are outlined in **Exhibit 1** and will be implemented after the first planning phase.

⁴ During the pilot phase from June 2025 to June 2028, partnership development will continue, with more partnerships forming among the four publishers and 13 PL providers. As these partnerships form, they will join the pilot phase.

Exhibit 1:	Strategies	to Support	Objectivity
	e la ce gio e		

Strategy Category	Strategy
Organizational Structure	Distinct Teams: Clearly defined roles and responsibilities for each team with no overlapping membership
	• Independent Oversight Lead: RTI senior leader and sponsor of the project who has direct supervision over both the project director and the research team lead, ensuring independence and objectivity
Information Control	Separate Knowledge Management: Use of separate secure Microsoft SharePoint sites to manage information and data
	Limited Access: Access to shared systems, data, and information limited through permission controls
	• Audit: Regular audits conducted through RTI's quality management process to ensure compliance with information-sharing procedures
Communication Channels	Dedicated Channels: Specific communication protocols for each team will be designed and used with Microsoft Teams as the dedicated platform
	Scheduled Team Collaboration/Coordination: Joint meetings scheduled to coordinate and collaborate on identified shared outputs and outcomes

Overview of This Research Plan

This document outlines the research and learning plan for the Scaling CBPL project. It specifies the <u>theory of action</u> and <u>logic model</u> for the project, identifies the <u>learning</u> agenda questions to be explored and describes the <u>research design</u>. A <u>measurement</u> plan aligns the LQs with sources of data and methods for <u>collecting data</u>. <u>Analysis and</u> reporting plans are also described.

2. Theory of Action

The theory of action for the current Scaling CBPL project aligns with the Foundation's overall K-12 PL strategy for supporting student learning in mathematics. Its overall strategy is:

If we align supply, demand, and the market on the attributes of quality curriculum-based PL by:

- Increasing the availability of CBPL services that support strategic curriculum partner titles
- Increasing system leaders' adoption of strategic curriculum partner titles and aligned PL services
- Contributing to the knowledge base on PL design features that support sustained improvements in instruction
- Making PL more effective and scalable through tech-enabled innovation
- Improving the quality of PL providers' services and providers' organizational health

And we support increased capacity of state, regional, and district PL staff, to deliver curriculum-based PL by:

- Increasing capacity of district PL staff to provide job-embedded professional learning
- Improving district and school conditions to enable CBPL and strong teaching
- Increasing capacity of state and regional agency staff to spread effective curriculum-based PL models and enabling system conditions

Then teachers in focus states report that

- They use HQIM
- Their district coordinates curriculum, instruction, and PL with its math vision
- They receive meaningful CBPL that includes coaching, peer learning, and workshops

Resulting in teachers delivering high-quality math instruction; students receiving highquality math instruction, reporting that they have motivating and engaging experiences that build positive math mindsets, and passing Algebra 1 by ninth grade.

Scaling CBPL Project Theory of Action

The current project contributes to the Foundation's overall K-12 strategy by supporting the development of partnerships between publishers and PL providers, anticipating that partners may decide to partner in one of three potential ways reflecting increasing levels of cohesiveness and understanding of each other's products and capabilities:

- **Type 1: Lead Generation:** The publishers and PLs share leads with each other for potential new customers (i.e., districts). With those shared leads, each entity may try to independently market and sell to that district. This partnership requires understanding each other's offerings.
- Type 2: Cross-Marketing/Selling: The partners identify that they possess complementary products and services, understand what each offers, have mutual trust to represent those offerings accurately, and agree to promote each other's offerings. In this type of partnership, the marketing and sales teams within both entities co-design a plan to market and sell complementary services. However, there is no single point of access (SPoA) for education entities to purchase these complementary services in one bundle.
- **Type 3: Co-Marketing/Selling Co-Branded Bundled Offerings**: The partners collaboratively develop and co-brand a new bundle of HQIM products and PL services as a SPoA for education entities, where each entity of the partnership can market/sell bundles. This represents the ideal type of relationship hypothesized to yield the greatest market impact, while also bolstering local PL capacity and student outcomes.

Exhibit 2 displays the theory of action for the Scaling CBPL project, by partnership type. The top row represents the theory of action for the entire project, while the subsequent rows each represent the partnership types described above.

Overall Project										
lf	Then	Yielding								
Publishers and PL forge partnerships to efficiently meet market demands for curriculum- based professional learning	 Partnerships can: Scale access to HQIM and job-embedded CBPL for districts, schools, and teachers Increase local PL staff capacity Improve the quality of HQIM and aligned PL services Streamline procurement processes and increase fiscal efficiencies (Only in type 3 partnerships) 	 Overall Increased reach of HQIM and CBPL For the Partners Increased customer base and Improved offerings For LEAs District coordination of curriculum, instruction, and PL aligned with vision For Teachers Increased and improved teacher use of HQIM For Students Increased access to high-quality math instruction Enhanced student education mindsets and academic abilities 								
	Partnership Type	Breakout								
	Type 1 Lead Ge	neration								
lf	Then	Yielding								
Publishers and PL providers facilitate connections to each other's customers	 Publishers and PL providers: Enable sales personnel within each entity to understand and identify opportunities for district customers 	 Overall Minimal increase in reach of HQIM and CBPL services (because some leads will result in purchases) For the Partners Increased number of customer leads Increased contract renewals 								
	Type 2: Cross-Mark	eting/Selling								
lf	Then	Yielding								
Publishers and PL providers promote their respective complementary services to each other's customers	 Publishers and PL providers Enable sales personnel within each entity to understand and identify opportunities for district customers and to promote each other's product and service offerings 	 Overall Moderate increase in reach of HQIM and CBPL services (because some cross-marketing/cross-selling will result in purchases) For the partners Increased number of closed deals Increased contract renewals 								

Exhibit 2: Theory of Change, by Partnership Types

Type 3: Co-Marketing/Selling Co-Branded Bundled Offering											
lf	Then	Yielding									
Publishers and PL providers collaborate to develop co-branded and aligned PL services and product solutions offered in a single combined unit for district to purchase from partnership	 Publishers and PL providers can: Improve the quality of the HQIM and CBPL, including through feedback loops on bundled offerings Ease procurement process through SPoA to coherent HQIM and CBPL services (e.g., eligibility for multiple fund streams) Improve the district's experience with the coherence of services provided by publishers and PL providers 	 Overall Marked increase in reach of improved quality, bundled HQIM and CBPL services For the partners Increased number of deals closed Increased contract renewals Increased client satisfaction Improved bundled offerings based on feedback loops For the LEAs Satisfaction with the purchase and procurement processes of the bunded aligned products and services For Teachers Teachers having access to HQIM and aligned PL supports Increased educator sentiment of having a trusted partner provider For students Increase access to high-quality math instruction Improved student mindsets and academic outcomes 									

PL: professional learning; CB: curriculum-based; HQIM: high-quality instructional materials; SPoA: single point of access

3. Logic Model

Exhibit 3 presents the logic model for the Scaling CBPL project, outlining the relationships between inputs, outputs, and short-, intermediate-, and long-term outcomes. Outcomes associated with co-marketing/selling co-branded bundled offerings partnerships (Type 3) are noted in purple.

Exhibit 3: Logic Model



Publishers/PL providers must recognize each other's strengths/shortcomings in delivery of HQIM and CBPL, and how they can support each other's goals and products/services. Education administrators must acknowledge and support the need for ongoing, embedded PL ultimately provided by internal, local personnel.

Publishers/PL providers exhibit increased altruistic principles in their business models.

4. Learning Agenda Questions

The Scaling CBPL project seeks to gather and analyze information through multiple methods and from multiple sources to address the following LQs. They are organized by overarching questions, with more specific questions embedded within them. Information about which types of partnerships the LQ will be explored, and when data will start to be collected to address the question, is included in parentheses, and summarized in **Exhibit 4** on page 20.

- A. What factors and processes facilitate the **development of partnerships** between publishers and PL providers? (All partnership types, start to address in Spring 2025 of the Partnership Development Phase)
 - 1. What aspects of the development process, including innovative grantmaking approaches (as applicable), supported the formation of a partnership? What aspects impeded the formation of a partnership?
 - 2. What features (characteristics and criteria met) possessed by the partner entity (i.e., publisher or PL provider) were most integral to the formation of a partnership? What features or behaviors made partnership formation unlikely/difficult?
 - 3. What technical assistance and tools provided by the intermediary team (e.g., intellectual property expertise support) were most valued by the partners during the partnership development phase? What would be helpful to incorporate into future iterations of the partnership development process? What elements are less essential/could be taken away?
- B. What factors and processes facilitate the health of the partnerships? (All partnership types, start to address start to address in Spring 2025 of the Partnership Development Phase)
 - 1. How do publishers and PL providers perceive the value of their partnerships (e.g., through lead generation, co-marketing, and cross-selling)?
 - 2. What strategies do publishers and PL providers use that improve or develop internal organizational structures and operations, including sales and marketing strategies, financial and technical operations, etc.?
 - 3. What aspects of partnerships do publishers and PL providers report that enable handoffs and service deliveries meeting district and educator needs?
 - 4. What technical assistance and tools provided by the intermediary team were most valued by the partners in supporting the ongoing health of the partnerships?

- C. How do publisher–PL provider **partnerships contribute to increased reach of HQIM-based PL**? (All partnership types, start to address in the Pilot phase)
 - 1. To what extent do partnerships between HQIM publishers and PL providers increase the reach of HQIM and aligned PL services?
 - a. To what extent do partnerships expand the customer base of HQIM publishers?
 - b. To what extent do partnerships expand the customer base of PL providers?
 - 2. What type and attributes of successful partnerships are most likely to result in increased reach for each organization type?
 - What attributes of bundled offerings, including technology aspects (e.g., GenAl, Al driven analytics), are most likely to result in increased reach for each organization type? (Only Co-Market/Sell Co-Branded Bundled Offerings partnership type)
- D. What drives **purchasing decisions** in the PL market? (All partnership types, start to address in the Pilot phase)
 - 1. What do decision-makers look for when selecting an external PL provider as part of its overall curriculum rollout and implementation plan?
 - How does the bundled offering impact the local procurement process? (Only Co-Market/Sell Co-Branded Bundled Offerings partnership type, start to address in the Pilot phase)
 - How does the local procurement process and local policy context, including state policy related to funding incentives and state adoption lists, impact leadership decisions to purchase (or not) a bundled offering? (Only Co-Market/Sell Co-Branded Bundled Offerings partnership type, start to address in of Pilot phase)
- E. What are **educators' experiences with and perceptions of bundled offerings**? (Only Co-Market/Sell Co-Branded Bundled Offerings partnership type, start to address in the Pilot phase)
 - 1. What are the district and school leader's experiences with the bundled offerings, and how does it compare with their prior curricular and PL experiences?
 - 2. What are teachers' experiences with the bundled offerings, and how does it compare with their prior curricular and PL experiences?
 - a. Influence on teacher perception of the efficacy and coherence of PL offerings and curricular materials.
 - b. Influence on use of key instructional practices (e.g., among "critical teaching practices and actions" identified in the K-12 math vision).

- c. Influence on teacher engagement in academic vision setting, implementation planning, and continuous improvement to achieve instructional coherence.
- d. Influence on teacher collaboration with colleagues to analyze student data and plan, reflect, and improve on instruction.
- e. Influence on teacher perceived acceptability and fit of the curriculum to meet students' needs.
- f. Influence on the frequency with which teachers use the curriculum.
- 3. How well does HQIM-based PL (given that it emphasizes student engagement) improve teacher perceptions of their ability to engage students effectively?
- 4. What system conditions are necessary for teachers to effectively implement specific strategies associated with partner titles (e.g., IM, Math Nation)?
- 5. What are the experiences and outcomes for students who receive instruction in schools where educators experience bundled offerings (e.g., student engagement with math, growth mindset, math achievement)?
- F. How do **feedback loops** within Bundled Offering partnerships contribute to improved quality of the bundled offerings? (Only Co-Market/Sell Co-Branded Bundled Offerings, address in Pilot phase)
 - 1. How do feedback loops between partner organizations (i.e., publishers and providers), including PL provider training mechanisms, contribute to quality and improvement to the bundled offering?
 - 2. How do feedback loops with district and school personnel contribute to product improvement?
 - 3. What collaboration norms within the partnership enable the use of feedback loops to improve the bundled offering?

5. Research Design

This will be an exploratory study from which we expect to provide descriptive findings and illustrative case studies that will highlight areas of promising practice and identify areas of potential impact. Because the Theory of Change hypothesizes potential impact on both the supply and demand sides of the market for HQIM and aligned PL, the research team is adopting a utilization evaluation framework that prioritizes findings that are highly usable for both GF and the partnerships that will inform further potential investments in CBPL and allow for further exploration of the potential impacts of cobranded, bundled HQIM and PL.

A utilization-focused evaluation (UFE) framework (Patton, 2008) is based on principles of usability of results, wherein the evaluation is designed and conducted to ensure that LQs and findings are considered useful and actionable to the intended end users of the information. The intention is for the evaluation to generate information that the Foundation and the participating curriculum and PL organizations will use to inform decisions and engage in continuous improvement focused on improving their products and delivery of services to customers. The key feature of a UFE is that researchers and the end users of the data collaborate on the research design and end users provide input on instrumentation and measurement planning to ensure that the results of the evaluation will align with their information needs.

To achieve this, the research team is working closely with the Foundation to develop the research plan and is working to ensure that the study is designed to yield results aligned with the project's Results Tracker Framework and the Partnership Health Metrics. The research team will share the plan with the partners and address any feedback. Draft instruments and protocols for data collection will be shared with the Foundation and the partners to ensure that they are set up to yield the desired information from participants. Specific plans for LEA and school site data collection will be provided to partners in advance of deployment to ensure that the appropriate grade-levels, sites, and respondents have been included. Data will be shared with the Foundation and the partners throughout the study and according to the reporting timeline to support continuous improvement.

The study is designed as a mixed-methods approach, incorporating quantitative and qualitative data from partners, the intermediary team, and LEAs. A mixed-methods approach will allow the Foundation and the partners to understand both how the investment has impacted the supply and reach of CBPL and how key stakeholders are impacted by the investment.

Though the study is purely descriptive, to support the UFE approach, the research team will seek ways to incorporate information and descriptions from comparison LEAs/schools that do not elect to purchase co-bundled offerings. As a first strategy for

gathering comparison information, the research team could provide partner sales teams with "exit" questions designed to informally capture feedback from LEA/school representatives choosing to forego purchases of co-bundled offerings. A second strategy would include the identification of LEAs that purchase co-bundled offerings but elect to pilot the use of HQIM and/or CBPL to a subset of schools, while other schools in the LEA continue to use existing materials and PL strategies. This scenario provides the opportunity for an in-district set of comparison schools. Finally, the research team, working through the partner sales teams, can identify LEAs/schools (a) purchasing non-bundled services or (b) not making any purchases that would be interested in informally participating in the research study. The informal participation would entail one or two interviews with key district personnel and a small focus group of mathematics teachers to gather information about their instructional experiences and perceptions of available support structures.

Sample

The Scaling CBPL study is designed to explore the interaction between three populations: curriculum publishers, PL providers, and LEAs/schools. The publishers and PL providers represent the supply side, providing educators with curriculum materials and PL opportunities, while the LEAs/schools represent the demand side calling for more innovative HQIM and CBPL opportunities to help teachers improve their craft. The study will utilize three samples from these populations to explore how the demand and supply sides interact when organized around different types of publisher/PL provider partnerships. Four publishers have confirmed their participation in the formation of partnerships with PL providers and the research study: Amplify, Great Minds, Imagine Learning, and Kiddom. Thirteen PL providers have agreed to explore the formation of partnerships with these publishers. The different types of partnerships (see the Theory of Action) will work to increase the reach of their products and services through sales to LEAs within the focus states. Though information on reach from all partnership type sales will be gathered and summarized for this study, this effort is particularly focused on the sub-sample of LEAs that agree to purchase co-branded bundled offerings and participate in the research study. The research team anticipates that some LEAs/schools agreeing to purchase co-branded bundled offerings, despite the offer of incentives for LEA personnel and teacher participation in data collection activities, will refrain from participating in the research study. Those agreeing to also participate in the research will provide information necessary to better understand the partnership, how it works, and how its products and services are used by educators serving high-needs student populations.

Curriculum Publishers & PL Providers

Here, we provide some descriptive background on the publishers agreeing to participate in the Scaling CBPL project and explore the formation of PL partnerships. This information was provided by the publishers in response to a request for information from the Foundation.

Amplify, a for-profit organization, serves more than 15 million students in all 50 states with its assessment, intervention, and curriculum solutions. LEAs in both California and New York, priority states in this study, use its Desmos Math product. Amplify is interested in partnering with PL providers to strengthen and accelerate implementation impact, integrate content support with broader practice development and change management (e.g., foster wraparound support, facilitate change management for educators and education systems), and learn and scale best practices for teacher and leader engagement and development. Amplify seeks a PL partner that can help (1) coach school leaders, (2) monitor curriculum implementation integrity, (3) support instructional leaders' planning, and (4) train educators on academic standards in mathematics.

Great Minds is a nonprofit publisher of two core math curriculum offerings: (1) Eureka Math (first released in 2015) and (2) Eureka Math Squared (first released in 2022). Eureka Math has been adopted in districts in all 50 states, with moderate (more than \$250K in product) to high adoption in all four focus states (California, Florida, New York and Texas). Eureka Math Squared has been adopted in districts in all 50 states, with moderates, with moderate to high engagement in California, New York, and Florida. Great Minds offers several PL services, including professional development, personalized coaching, PL ondemand and leadership consulting.

Imagine Learning is a for-profit K-12 educational product and service provider of edtech products and services across K-12 markets with direct sales to districts. Imagine Learning is seeking support for its partnership with Illustrative Mathematics, a nonprofit curriculum developer. Imagine Learning-Illustrative Mathematics has been adopted in 21 states, including California and New York, with Illustrative Mathematics delivering most of the implementation of PL.

Kiddom is a for-profit corporation providing comprehensive educational solutions for K-12 schools and districts, focusing on the integration of curriculum, instruction, and assessment through its proprietary digital platform. Kiddom operates in 34 states, specifically delivering math products in California, Florida, and New York and has applied for approval in Texas.

To complement the publishers, 13 entities with representation across the four focus states, have been identified to serve as potential PL provider partners (e.g., Bank Street College of Education, ConnectEd, New Teacher Center and TNTP). These providers

offer support in areas such as district leadership advising, large-scale PL & workshops, instructional coaching and teacher collaboration.

Local Education Agencies (LEAs)

The Scaling CBPL project also entails the tracking, documentation, and description of several different populations of LEAs/schools. At the highest level, all LEA schools eligible for inclusion in the study must (a) serve a greater than 50% concentration of priority students (i.e., students who are Black, Latino and/or from low socioeconomic status homes), (b) be using a blended paper/digital mathematics curriculum, and (c) must be located in one of four focus states: California, Florida, New York, or Texas. Thus, the eventual sample of participating LEAs is purposive: districts serving student populations most likely to benefit from access to HQIM and CBPL, and those located in states approaching decision-making deadlines for curriculum adoption are being targeted for inclusion.

In addition to the selection criteria outlined above, only a sub-sample of districts will ultimately decide to purchase the Co-Marketing/Selling Co-Branded Bundled packages. Further, only a subset of these districts will agree to participate in the research study. Thus, it will be important for the research team, to the extent possible, to use available data to describe (a) LEAs/schools from each of the four states, (b) the LEAs/schools meeting the inclusion criteria, (c) LEAs/schools purchasing bundled offerings and (d), LEAs/schools agreeing to participate in the research team understand how the smaller sample of LEAs/schools participating in the Scaling CBPL study compare with the typical entity in their respective state. Further, an exploration of the sub-sample data summaries may help expose the presence of selection effects:⁵ what, if anything, is different about an LEA choosing to purchase the bundled offering relative to a district that does not choose to make the same purchase.

The Scaling CBPL goal is for each of four curriculum publishers to have a Type 3 Co-Marketing/Selling Co-Branded Bundle partnership established with a PL provider by May 2025, with two LEAs agreeing to purchase the bundles offerings by August 2025,⁶ yielding a total of approximately eight participating LEAs/schools. By August 2025, each publisher is anticipated to form an additional Type 3 partnership, with two more LEAs

⁵ Though less of a threat to the case study design proposed here, understanding whether selection effects are present can inform future iterations of partnership formation support and marketing strategies.
⁶ It is likely this first set of districts will not have purchased the bunded offerings through a single procurement, given district sales cycles for procurement tend to be September–February for the following school year. This first set of LEAs recruited for purchasing bundled offering are expected to be LEAs already using the publishers' HQIMs or the PL providers service, and during spring 2025 they would purchase the other partners' co-branded service or product.

agreeing to purchase the bundled offerings starting in winter 2026,⁷ resulting in a total of about 16 participating LEAs/schools ideally distributed across the four focus states.⁸ Additional partnership development phases will occur January–May 2026 and January–May 2027, during which additional Type 3 partnerships are expected to form⁹. We therefore expect additional LEAs will purchase co-branded bundled offerings from these new partnerships during 2026–2027 and 2027–2028 school years, respectively. We also anticipate Type 3 partnerships formed during the first May–August 2025 partnership development phase will continue to sell their bundled offerings to additional LEAs during 2026–2027 and 2027–2028 school years. Although the research team will be able to collect and summarize sales/key performance indicator (KPI) data for all partnerships from Annual Reports across all three years as a representation of reach, no more than 12 LEAs will be retained for inclusion in the research activities designed to capture detailed experiential information.¹⁰

The research team will make use of available data summaries to understand and communicate how reflective the participating LEAs are of entities from their respective states and the country, more broadly.

Exhibit 4 summarizes information about which types of partnership types the overarching LQs (and associated sub-questions) will be explored, when data will be collected to address the question, and how cohorts of districts experiencing bundled offerings (from Type 3 Co-Marketing/Co-Selling Co-Branded Bunded Offering partnership) will be considered for inclusion in the case studies. Note that for the question related to how bundled offerings impact the local procurement process and decision-making for purchasing, data from Type 3 publishers and PL provider partners

⁷ Similar to the situation with the first set of districts (see footnote 6), it likely the second set of districts recruited to purchase bunded offerings for use in winter 2026 will also not have purchased as a single procurement, Rather they are likely to be LEAs already using the publishers' HQIMs or the PL providers service, and in fall 2025 they would purchase the other partners' co-branded service or product for use in spring 2026.

⁸ The research team anticipates that of the 16 LEAs/schools purchasing Co-Marketing/Selling Co-Branded bundles, only about 8-10 will agree to participate in the research study. To adequately represent a state, at least one LEA/school from each state is necessary. All LEAs/schools will contribute to secondary reach/KPI metrics, regardless of participation in the research study. Should LEAs/schools decide to discontinue participation in the research study or discontinue purchasing bundled offerings, the research team will (a) engage in an exit interview/survey to learn about the decision to leave and (b) explore identifying replacement LEAs/schools.

⁹ Currently, no specific targets are set for the number of additional partnerships formed during these partnership development phases, nor targets for how many LEAs will purchase bundled offerings from these partnerships.

¹⁰ The research team will explore phasing out some LEAs purchasing bundled offerings in 2025-26 from the research study as additional LEAs make similar purchases in subsequent school years. Phasing out will keep the number of LEAs manageable from a research standpoint, while inclusion of additional LEAs will bolster the representativeness of our sample.

about their experiences attempting to sell as single bundled procurement will be available starting in the 2025–2026 school year, it is possible that LEAs who experience bunded offering may only have purchased as a single procurement for the first time for the 2026–2027 school year and thus their experience with single procurement can start to be collected that year. The research team suggests that any LEAs purchasing bundled offering for the first time in the last school year of the pilot (2027–2028) be considered for inclusion as a case study LEA for a limited scope; such as collecting information via interviews of district leaders about their experiences purchasing the bundled offering.

Exhibit 4: LQs, Partnership Types, Project Phases, and District Cohorts



(some*) means that districts recruited from partnerships developed during Phase 1A and Phase 1B should be able to test this.

6. Measurement Plan

Exhibit 5 presents a measurement plan to support research and learning goals of the Scaling CBPL project. It is organized by the LQs, noting the sources of data to be used to address each question. Additional details about data sources follow the exhibit.

Exhibit 5: Cro	osswalk of Le	earning Qu	lestion by	Data Sour	се
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	Data Sources				
Learning Questions	Partner	Intermediary	LEA - District	LEA- Teacher	LEA - Student
A. What factors and processes facilitate the development of partnerships be	etween publis	hers and PL prov	iders?		
A1. What aspects of the development process, including innovative grantmaking approaches (as applicable), supported the formation of a partnership? What aspects impeded the formation of a partnership?	•	•			
A2. What features (characteristics and criteria met) possessed by the partner entity (i.e., publisher or PL provider) were most integral to the formation of a partnership? What features or behaviors made partnership formation unlikely/difficult?	•	•			
A3. What technical assistance and tools provided by the Intermediary Team (e.g., intellectual property expertise support) were most valued by the partners during the partnership development phase? What would be helpful to incorporate into future iterations of the partnership development process? What elements are less essential/could be taken away?	•	•			
B. What factors and processes facilitate the health of the partnerships?					
B1. How do publishers and PL providers perceive the value of their partnerships (e.g., through lead generation, co-marketing, and cross-selling)?	•				
B2. What strategies do publishers and PL providers use that improve or develop internal organizational structures and operations, including sales and marketing strategies, financial and technical operations, etc.?	•				
B3. What aspects of partnerships do publishers and PL providers report that enable handoffs and service deliveries meeting district and educator needs?	•				

		Dat	ta Sources		
Learning Questions	Partner	Intermediary	LEA - District	LEA- Teacher	LEA - Student
B4. What technical assistance and tools provided by the Intermediary Team were most valued by the partners in supporting the ongoing health of the partnerships?	•	•			
C. How do publisher-PL provider partnerships contribute to increased read	ch of HQIM-b	based PL?			
C1. To what extent do partnerships between HQIM publishers and PL providers increase the reach of HQIM and aligned PL services?	•	•			
C1A. To what extent do partnerships expand the customer base of HQIM publishers?	•	•			
C1B. To what extent do partnerships expand the customer base of PL providers?	•	•			
C2. What type and attributes of successful partnerships are most likely to result in increased reach for each organization type?	•	•			
C3. What attributes of bundled offerings, including technology aspects (e.g., GenAI, AI driven analytics), are most likely to result in increased reach for each organization type?	•	•	•	•	
D. What drives purchasing decisions in the professional learning market?			·	·	
D1. What do decision-makers look for when selecting an external PL provider as part of its overall curriculum rollout and implementation plan?	•		•		
D2. How does the bundled offering impact the local procurement process?	•		•		
D3. How does the local procurement process and local policy context, including state policy related to funding incentives and state adoption lists, impact leadership decisions to purchase (or not) a bundled offering?	•		•		

	Data Sources							
Learning Questions	Partner	Intermediary	LEA - District	LEA- Teacher	LEA - Student			
E. What are educators' experiences with and	perceptions	of bundled offer	rings?					
E1. What are the district and school leader's experiences with the bundled offerings, and how does it compare with their prior curricular and PL experiences?			•					
E2. What are teachers' experiences with the bundled offerings, and how does it compare with their prior curricular and PL experiences?				•				
E2A. Influence on teacher perception of the efficacy and coherence of PL offerings and curricular materials.				•				
E2B. Influence on the use of key instructional practices (e.g., among "critical teaching practices and actions" identified in the K-12 math vision)				•				
E2C. Influence on teacher engagement in academic vision setting, implementation planning, and continuous improvement to achieve instructional coherence.			•	•				
E2D. Influence on teacher collaboration with colleagues to analyze student data and plan, reflect, and improve on instruction.				•				
E2E. Influence on teachers' perceived acceptability and fit of the curriculum to meet students' needs.				•				
E2F. Influence on the frequency with which teachers use the curriculum.				•				
E3. How well does HQIM-based PL (given that it emphasizes student engagement) improve teacher perceptions of their ability to engage students effectively?				•				
E4. What system conditions are necessary for teachers to effectively implement specific strategies associated with partner titles (e.g., IM, Math Nation)?			•	•				

	Data Sources							
Learning Questions	Partner	Intermediary	LEA - District	LEA- Teacher	LEA - Student			
E5. What are the experiences and outcomes for students who receive instruction in schools where educators experience bundled offerings (e.g., student engagement with math, growth mindset, math achievement)?					•			
F. How do feedback loops within Bundled Offering partnerships contribute to	the improved	l quality of the bu	ndled offerin	gs?				
F1. How do feedback loops between partner organizations (i.e., publishers and providers), including PL provider training mechanisms, contribute to quality and improvement to the bundled offering?	•	•						
F2. How do feedback loops with district and school personnel contribute to product improvement?			•	•				
F3. What collaboration norms within the partnership enable the use of feedback loops to improve the bundled offering?	•	•						

7. Data Collection

Data Shared By/Collected from Publisher & PL Partners

The Scaling CBPL research team will engage with participating publisher and PL provider partners to acquire data elements aligned with the constructs presented in the logic model (**Exhibit 3**) and via sources described in the measurement plan table (**Exhibit 5**). Outlined below are the collection strategies for use in gathering the necessary data to document and describe important constructs, including partnership health, publisher and PL provider reach, publisher and PL provider customer satisfaction, and teacher instructional practice integrity.

Business Agreement Reviews

Publishers and PL providers will formalize partnerships by establishing business agreements defining revenue sharing, licensing, intellectual property rights, data sharing terms and the roles and responsibilities of each party. These agreements also outline how sales teams will be staffed, how PL providers and product developers will collaborate, and protocols for communication and sharing of information. The content of these agreements will help the research team accurately describe partnerships formed and will inform the development of other data collection protocols (i.e., interviews, focus groups, and/or surveys) designed to collect information about partnerships and the products they provide. Finally, the agreements will provide important context for understanding the health of each partnership and for informing future partnership formation strategies.

Partner Go-to-Market (GTM) Plans

Publishers and PL providers taking part in any of the three partnership types will collaborate to develop a GTM plan outlining the goals for the partnership, including key state reach targets, KPIs, and customer satisfaction ratings, and the value proposition of the partnership. GTM plans will be established by May of each year for use in guiding work for the upcoming school year. The goals outlined in the GTM will enable the research team to track and determine partnership performance based on data provided in interim and final Annual Partner Reports (see below).

Annual Partner Reports (APRs)

The APRs, including interim (July; mid-year for current calendar year) and final (February; summary for prior calendar year) reports, will include publisher and PL partner data on goals outlined in the GTM Plan. Partners will provide sales and marketing KPI data (e.g., number of leads generated, website traffic, conversion rates, and number of districts engaged) as well as customer satisfaction data (i.e., satisfaction

survey ratings on topics including ease of curriculum use, PL services offered/provided, and experiences/impacts on the procurement process) and customer retention rates. Partners will also be asked to indicate if their business agreements are still in place and if any changes have been made and to describe those changes and the reasons for them. Information provided by partners in these reports is integral for understanding the performance of each partnership type toward outcomes outlined in the Scaling CBPL logic model. Given the amount of information needed from the APRs, the research team will develop a data collection template containing the relevant metrics, KPIs, and satisfaction elements to share with publishers and PL providers.

Partner Surveys, Interviews & Focus Groups

Though partners will provide customer satisfaction and sentiments related to products and procurement, it is equally important to understand experiences of partners. The research team will develop self-report surveys and interview/focus group protocols to collect information from partner staff and representatives about the satisfaction with their partnerships, the level and efficiency of communication and mutual support within the partnerships, satisfaction with the functioning of the partnership intermediary, the quality of HQIM and CBPL products, and their experiences with LEA/school procurement processes.

Observations/Walkthroughs

A key aspect of the Scaling CBPL project is increasing teacher access to HQIM and CBPL, in turn impacting how teachers plan for and provide mathematical instruction to students. The collection of observation/walkthrough data encompasses in-person and "virtual" observations of teacher instruction. The research team will attempt to align and synthesize as much data from the individual observation tools used by the publishers and PL partners to document teacher classroom practices and their alignment to provided HQIM and CBPL. These data, potentially in combination with Digital Curriculum MetaData (see below), will be used to assess teacher instructional practice integrity.

Digital Curriculum MetaData

Publisher partners' digital curriculum systems can capture a wide breadth of information about how teachers (and students) engage with and use their systems. This can include time spent logged on to the system, curriculum units/modules accessed, or planning/organizational features used. The research team will engage with each provider to understand what metadata are available in their systems, the format of the data, and how publishers typically analyze the data. RTI will also seek to understand from publishers and PL provider partners how data available metadata align with content covered in PL offerings. Acquiring the information captured by these systems, or

summary analyses conducted by the publishers, may be used, in concert with observation data, to understand the level of teacher instructional practice integrity based on the HQIM and content made available during PL opportunities. These data could be used in both a formative and summative manner, allowing the research team to provide partners feedback about product and service use and identify areas for improvement, while also documenting how well teachers, schools, and/or LEAs are able to use the materials and services with integrity. Given that publisher platforms vary in sophistication, RTI anticipates it will be challenging to identify comparable data elements across platforms. Furthermore, the data are likely to be complex and uniquely structured such that analyzing them for all case study sites may be outside the scope of the current investment. Nevertheless, RTI will explore with each partnership possibilities for efficiently incorporating these data (or publisher-provided summaries) to assess teacher instructional practice integrity.

Data Shared By/Collected from Intermediary Team

The Scaling CBPL logic model identifies as a necessary enabling condition an intermediate team that successfully fosters an environment where publisher/PL relationships can grow. Each partnership is supported by partnership liaison from RTI's intermediary team who supports publishers and their potential professional learning partners to engage in a set of activities to develop and bring to market a "bundled offering." They support the establishment of partnership agreements, facilitate discussions, and support partners in using templates developed by the intermediary team, such as templates for GTM Plans and Non-Disclosure Agreements. Additionally, the intermediary team provides support in addressing barriers and challenges as needed and supports bi-directional communication among the partners and the Foundation. The research team plans to collect information from the intermediary team via two methods in order to describe the intermediary activities and their experiences in supporting the partnership.

Partner Meeting Tracker Data

Partner Liaison track each meeting they facilitate among the partners, completing a form to document barriers discussed or observed during the meeting, factors that facilitated an effective meeting, notes on next steps (including what resources are needed to support the partners), and general facilitator impressions of the meeting.

Intermediary Team Members Interviews

The research team will interview intermediary team members to gather additional information on their perspectives about factors and processes that have facilitated the development and health of partnerships.

Data Shared By/Collected from LEAs

RTI will engage participating LEAs from key focus states¹¹ to acquire data elements aligned with the Type 3 (Co-Marketing/Selling Co-Branded Bundled Offerings) partnerships outlined in the project theory of action and representing logic model outcomes. Data collection efforts will include teacher/educator surveys, interviews/focus groups with district leaders, student surveys, and the acquisition of secondary student outcome data including formative and summative student mathematics outcome measures. These data points will be used to develop LEA-based case study summaries documenting how Publisher/PL Provider partnerships influence local PL provisions and procurement efforts, teaching practices and teacher perceptions of self-efficacy, and student engagement and growth mindset, as well as mathematical abilities. Wherever possible, the RTI research team will seek to minimize or offload the burden of data collection activities on education personnel by using data from instruments already being administered, acquiring secondary data from provider systems, or making requests for collected data from the respective state education agencies. Case study LEAs will receive an annual research participation incentive of \$20,000 to offset time/burden associated with data collection activities.

District Leadership Interviews and Focus Groups

The research team will identify individuals in key leadership roles from each district for participation in individual interviews or focus groups to gather insights into how district PL opportunities have changed, whether the district vision or planning for future PL has been influenced, and whether procurement efficiencies have been realized. Learning how different partnerships, or specific aspects of those partnerships, in concert with state and local contexts, may impact district PL planning and provision can help inform future partnership formation efforts. Key insights from district leaders will also contribute to PL offerings, partnership formation, and procurement strategy knowledge generation for dissemination to the larger education community.

Teachers/Educators Surveys, Interviews, and Focus Groups

Student achievement notwithstanding, teachers are most likely to experience change stemming from the formation of publisher and PL provider partnerships. District-level benefits and efficiencies realized through the cohesion of HQIM and CBPL will assuredly be passed through to classroom educators. The RTI research team will craft and administer web-based teacher surveys designed to capture ratings of publisher products and PL offerings, self-reported perceptions of instructional practice integrity and self-efficacy and background information about their local context, including

¹¹ Key focus states include California, Florida, New York and Texas.

adopted math materials, the delivery medium of those materials, or the availability of interim assessment for use in progress monitoring.

Instruments will be drafted in alignment with the existing, annual K-12 Enactment Math Teacher Survey, incorporating Tier 1 (necessary for reporting), 2 (important contextual information), and 3 (additional contextual information) items. Items will target measuring constructs such as their district's vision and coherence for instruction and professional learning, available school- and district-provided teacher supports, mathematics curriculum materials in use, and perceptions related to PL opportunities and experiences. A subset of the items from the K-12 Enactment Math Teacher Survey will provide the research team with the ability to draw comparisons to nationally representative data collected through the American Educator Panels¹² surveys.

The research team will also identify a sub-sample of teachers for participation in virtual/in-person focus groups and/or interviews. Data from district leaders, teacher surveys, and/or partner customer satisfaction survey will be used to identify LEAs or schools exhibiting outcomes or experiences that would provide valuable information to the CBPL project knowledge base. Follow-up, semi-structured, data-informed interview/focus group protocols will be developed to facilitate probing teachers for greater details about their use and experiences with publisher and PL partner materials and training opportunities.

Finally, PL provider (<u>outlined here</u>) teacher observation activities within participating LEAs will be augmented to include aspects specifically related to mathematics instruction. Instruments such as the Illustrative Mathematics Implementation Reflective Tool11¹³ will be adapted/used to capture information about how teacher practices and strategies are being impacted by partner products and services.

Students Surveys and Assessments

Ultimately, being able to scale CBPL to more districts and schools is intended to positively impact teachers' abilities to make use of HQIM in the delivery of high-quality mathematics instruction to students. The CBPL theory of action, therefore, outlines an expectation for positively influencing student attitudes and engagement, in addition to mathematics achievement. The research team will capture the data necessary to explore these potential influences using student surveys and available secondary data (with the disclaimer that the research is exploratory and not designed to test causal linkages).

¹² American Educator Panels survey is conducted by RAND: <u>https://www.rand.org/education-and-labor/survey-panels/aep.html</u>

¹³ <u>https://illustrativemathematics.blog/2024/08/29/reintroducing-the-implementation-reflection-tool/</u>

Surveys

Many LEAs routinely use student surveys to measure growth mindset and mathematics engagement. Data from those already-in-place surveys have been used previously to support effective outcomes measurement for other Foundation Enactment investments. Following this approach, the research team will investigate existing student survey data collection in each case study LEA and consider using these processes to minimize administrative and response burden. If the LEA does not already have a student survey in place, RTI will create web-based surveys aligned with validated instruments to capture measures of growth mindset and mathematics engagement. Separate instrument forms will be developed for early and middle/high school grade students to accommodate different language levels and complexity.¹⁴

The research team will analyze the collected data for the purposes of (a) psychometrically validating the instruments and relevant sub-scales, (b) reporting item response patterns, and (c) summarizing scale factor scores at the relevant levels level (i.e., school, district, or state).

Assessments

Student assessments provide the research team with an objective method for monitoring the mathematics performance of students in LEAs purchasing Co-Marketing/Selling Co-Branded Bundled products. Formative, interim assessments (i.e., progress-monitoring tools) are typically administered several times throughout the school year and are designed to provide checkpoints for monitoring student skill and knowledge acquisition leading up to state-based summative assessments typically administered toward the end of the year.

Formative assessments, including iReady14¹⁵, NWEA MAP¹⁶, Florida Assessment of Student Thinking (FAST)¹⁷, and the Interim Comprehensive Assessment (ICA)¹⁸ are administered at least twice per year and provide an indication of student relative performance (i.e., percentile rank/norm-referenced scores) and predictive performance (i.e., criterion-referenced based likelihood of meeting summative assessment criteria for 'on grade level' designations). Where possible, standardized metrics will be gathered

¹⁴ Student survey items will be adapted from existing instruments found in the research literature pertaining to motivation (Fiorella, et al., 2021), mathematics engagement (Wang, et al., 2016), mathematics mindset (Youth & Teen Math Mindset Study by NORC).

¹⁵ <u>https://www.curriculumassociates.com/reviews/assessment/diagnostic-scores-placements</u>

¹⁶ <u>https://www.nwea.org/the-map-suite/</u>

¹⁷ <u>https://www.fldoe.org/accountability/assessments/k-12-student-assessment/best/</u>

¹⁸<u>https://www.cde.ca.gov/ta/tg/sa/sbacinterimassess.asp#:~:text=Interim%20Comprehensive%20Assess</u> ment%20(ICAs)%20are,%2C%20and%20claim%2Dlevel%20information.

from schools/districts to facilitate aggregated reporting (e.g., presenting 'on-grade-level' percentages, by student grade level, across an entire state).

The research team will also gather the respective state summative student mathematics results from participating LEAs/schools. In California, this entails the California Assessment of Student Performance and Progress (CAASPP) mathematics assessment, ¹⁹ the FAST assessment in Florida, The New York State Testing Program,²⁰ and State of Texas Assessments of Academic Readiness (STAAR).²¹ These state-level assessments are designed to provide a summative assessment of student mathematics achievement. These assessments are administered toward the end of the academic year, yielding student scale scores and achievement levels, denoting whether a student is "on grade level" or "proficient"²² based on state standards. Here, the research team will make use of "percent proficient"²¹ metrics to report data across states but aggregated to sub-group levels (i.e., by student background characteristics such as race/ethnicity and low socioeconomic status).²³

Data Collection Activity Timeline

Exhibit 6 outlines the timeline for data collection activities annually with partners, the intermediary team, and LEAs, with notes about the temporal reference points of the data being collected, and when the data will be transferred to RTI in cases where RTI is not collecting the data directly.

¹⁹ <u>https://www.cde.ca.gov/ta/tg/sa/</u>

²⁰ https://www.nysed.gov/state-assessment/new-york-state-testing-program

²¹ <u>https://tea.texas.gov/student-assessment/staar</u>

²² Percent proficient include all students attaining scores at or above the state-defined threshold for proficiency.

²³ The research team will accommodate obtaining summary data from partners and/or LEAs that will represent aggregated data at the level of various subgroups (e.g., the percent proficient on Texas STAAR mathematics assessment by race/ethnicity). Summarized data may be more easily and readily attainable.

Element	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Notes
Data from Partners													
Business Agreements and GTM Plans											-		Shared with RTI for each partnership formed at the end of each Partnership Development Phase (January–May 2025, 2026, 2027).
APRs	Int							Fin					Interim shared with RTI each July for current calendar year (CY) and final each February for prior CY. First report will be February 2026 for May 2025–December 2025.
Partner Survey & Interviews								•					RTI to conduct annually. RTI will also conduct summer 2025 (not shown in table) for the first time.
Teacher Observations (for case study LEAs)													Partners to conduct teacher observations. RTI to clarify appropriate timing with each partner. Partners to share data/result with RTI team in July Partner Reports for prior school year (SY).
MetaData (for case study LEAs)													RTI to explore availability and potential for inclusion of metadata with each partner. Partners to share data/result with RTI in July Partner Reports for prior SY.

Exhibit 6: Annual Data Collection Activity Timeline

Element	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Notes
Intermediary Team Data													
Partner Meeting Tracker													RTI intermediary team logging partner meeting information continually, within 48 hours of each meeting. Intermediary team to share data with RTI research team each April for inclusion in June report.
Intermediary Team interviews										-			RTI research team to interview intermediary team each April for inclusion in June report.
LEA Data (for case study LEAs)													
District Leader and Teacher Interviews/focus Groups										-	•		RTI to interview/focus group district leaders and teachers each spring for inclusion in June report.
Teacher Survey			В	В					•		•		Baseline teacher survey administered by RTI fall of first SY as case study site. Subsequent teacher surveys each spring. Include results in September supplement report.

Element	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Notes
Student Survey			В	В									RTI team to clarify with each case study LEA existence of already-in- place student surveys. If they do exist, RTI to leverage those, using spring survey from SY before bundled offering experience as baseline, and subsequent spring surveys as post-bunded offering surveys. If no in-place survey, RTI to offer standard survey, with baseline in fall of first SY. Subsequent student surveys each spring. Include results in August supplement research report.
Student Assessments			F	F			F	F		SA			RTI team to clarify with each LEA formative assessment schedule. RTI to request LEA share formative and summative assessment data when summative data available (late summer/early fall following the SY). RTI to include in June report of the next SY.

Key:

Int = Interim, Fin = Final

B= baseline surveys administered in fall of first school year of LEA pilot. Afterwards, spring surveys will be administered each school year of the LEA pilot.

F = Formative/interim assessment, SA = state assessment.



Data Sharing Agreements

RTI expects that two types of Data Sharing Agreements (DSAs) will be needed for the research project:

Type 1: Between RTI and Each Partner

These DSAs, to be established starting in March 2025, will cover the data to be shared by each partner with RTI, noted above in <u>"Data Shared By/Collected from</u> <u>Publisher & PL Partners</u>". RTI expects that the publisher and PL–provider partners will establish agreements identifying types of shared data they and manner of sharing in their own business agreements.

Type 2: Between RTI and Each LEA

These DSAs, to be established as LEAs join the pilot study, starting in summer 2025 will cover the data to be shared by each LEAs with RTI, noted above in <u>"Data Shared By/Collected from LEAs</u>". RTI anticipates that partners working with the LEA may want to also access data, such as interim mathematics assessment, and therefore suggest that the DSAs with districts include the relevant partners to reduce the need for LEAs and partners to establish separate DSAs. RTI expects to request grade-level data, not classroom level data. Thus, the research team does not expect to need to link students with teachers to be able to assess, for example, if students of teacher A who reported higher levels of math instructional self-efficacy experienced higher growth in their mathematics growth mindset. Therefore, RTI does not anticipate needing to request teacher or student personally identifiable information.

RTI is preparing templates for both sets of DSAs, which outlines the proposed use and analysis plans for the data, and terms and conditions for securely transferring, protecting, and ultimately destroying the data at the end of the study. The DSAs will specify that RTI will be sharing analyses from the data with the Foundation. Draft DSAs will be prepared for each partner and LEA to review, and RTI will collaborate with each party to finalize the DSAs. RTI anticipates that some LEAs may require research applications and reviews, which RTI will prepare and submit.



8. Analysis and Reporting

Analysis

The RTI research team, guided by the Scaling CBPL logic model, will engage in descriptive quantitative and thematic qualitative analyses in support of a case study design. At the highest level, data will be summarized to facilitate the development of a case study reporting for regions within each of the four focal states. Subsequently, within each state, case study summaries of the participating districts will provide greater detail on how local contexts, utilization, teachers employed, and students served have influenced the HQIM CBPL experience. We propose to use joint displays²⁴ to facilitate the presentation of quantitative and qualitative data within the case study summaries.

Partnership Functioning

Quantitative data collected from partner APRs and partner surveys will be summarized at the state and partnership type levels to understand how partnerships have impacted reach, sales, and other important product KPIs. Descriptive statistics summarizing the number of leads generated, number of districts engaged, and deals closed will elucidate how the partnership efforts fared within each state by region. Analysis of qualitative data, including the partner Business Agreements, GTMs, and partner interviews and focus groups will enable the research team to identify common themes within the partnership types, and by partner participants (i.e., publishers and PL providers). Crossreferencing quantitative summaries and qualitative themes will provide a holistic assessment of how partnerships function, what pain points or challenges exist, and what aspects work well.

LEA Experience

The impact of the purchase of co-marketed/co-bundled offerings from the LEA perspective will be presented through a summarization (i.e., thematic analysis) of qualitative information gathered during interviews with LEA leaders. LEA leaders will be interviewed to gather their perceptions and feedback on components of the procurement process, the merging of HQIM with teaching practices, and the logistics of incorporating CBPL offerings into the school operations calendar. Leaders will be asked to expand on what worked well, what challenges or complications were encountered,

 ²⁴ Fetters MD, Curry LA, Creswell JW. Achieving integration in mixed methods designs-principles and practices. Health Serv Res. 2013 Dec;48(6 Pt 2):2134-56. doi: 10.1111/1475-6773.12117.
 Fetters, M. D., & Tajima, C. (2022). Joint Displays of Integrated Data Collection in Mixed Methods Research. International Journal of Qualitative Methods, 21. <u>https://doi.org/10.1177/16094069221104564</u>



and what their ideas are for improving the LEA co-marketed/co-bundled purchasing experience

Educator Experience

Using a similar approach, quantitative summaries of observation/walkthrough data, Digital Curriculum MetaData and teacher surveys will help document teacher experiences with publishers' products and PL offerings, supports provided by local districts, as well as instructional practice integrity. In particular, the research team can triangulate on instructional practice integrity using data from self-report teacher data, objective observation data, and Digital Curriculum MetaData. Qualitative information gathered from teacher interviews/focus groups as well as observations/walkthroughs will be analyzed to find recurring themes and trends for reporting alongside quantitative educator experience summaries. Focusing on the instructional practice integrity construct, qualitative summaries will help the research team understand quantitative trends. For example, teachers may provide reasons during interviews/focus groups noting why their usage of the Digital Curriculum was limited, coinciding with trends revealed when examining system logins, time spent in the system, or module usage rates. Here again, we anticipate providing both state- and LEA/school-level case study summaries that paint a comprehensive picture of the Co-Marketing/Selling Co-Branded Bundled Offering experience.

Student Outcomes

The analysis of student outcomes will also make use of descriptive, quantitative summaries. Student access to high-quality math instruction and student mathematical growth mindsets will be collected through student surveys, leveraging student surveys already in place in LEAs and for LEAs that do not have a relevant survey in place, offering a standard survey based on an existing validated instrument. Under both scenarios, construct-level scores will be calculated from individual items to represent access and engagement, and summaries of construct scores can be presented at the state and LEA/school level. For LEAs with in-place student surveys (presumably in the spring), the prior year's surveys, before the LEA experienced the bundled offerings, will serve as baselines. Each subsequent spring survey will be compared with the baseline data. For LEAs that do not have relevant in-place student surveys, RTI will request students be surveyed with the provided instrument the fall for the first pilot school year, and each subsequent spring.



The analysis of student performance on interim formative assessments will result in a presentation of the proportion of students "on grade level" summarized across monitoring instruments at the state and LEA/school levels, by time (i.e., beginning of year, middle of year, and end of year). This longitudinal presentation of student performance can be interpreted as an estimation of growth in student mathematical ability across the school year. Similarly, state summative assessment data will be summarized using the "percent proficient" metric to facilitate presentation across (and within) states. Both the interim and summative assessment data will be further disaggregated by available subgroups (i.e., racial/ethnic subgroups, socioeconomic groupings, etc.), allowing us to disentangle student experiences for the Scaling CBPL target population (i.e., high need students).

Where appropriate student mathematics assessment performance will be presented in joint displays along with teacher qualitative themes and quotes as a means of triangulation. For example, if teachers express positive sentiments regarding their use of HQIM materials and CBPL offerings, presenting these alongside positive student performance trends provides insight into the interrelationship between positive teacher experiences and student outcomes.



Reporting

The research team, in partnership with the intermediary team, will provide Intermediary and Research Annual Reports over the period of performance beginning in June 2025. A supplement to each June annual report will be produced each September to include additional data that have been collected and analyzed since the June report. Exhibit 7 details these annual and supplemental reports across the duration of the project. It is important to note that student achievement data for the prior school year will be included in the June report of the following year (e.g., reporting of student achievement data will lag almost a full school year given student achievement data are not available until late summer/early fall).

The reports will address learning questions for all types of partnerships, case study summaries, and data-informed actionable insights. The following information will be presented within the annual report and supplemental report along with actionable insights and recommendations for improvement.

- **Overall Partnership Health**: For each partnership, we will provide a summary of the following data and information:
 - An overall indicator of partnership health based on the progress in meeting goal targets set for each partnership health category.
 - A summary of progress toward target goals for each partnership health category using varied data source, including
 - Financial health (e.g., increased reach of HQIM and aligned professional learning)
 - Customer satisfaction and impact (e.g., improved outcomes for educators self-efficacy and students math experience, engagement, and achievement)
 - Partnership operational efficiency, collaboration communication, and trust (e.g., effective joint sales strategy, effective communication)
 - Learning and growth (e.g., strategic alignment, innovation, and quality, and sustainability)
- **Summary of Reach Data by State**: For each of the focal states, we will provide a summary of the following data:
 - Partnership reach measures at the state and regional levels (for all partnership types, total and disaggregated by partnership type and partner type), including number of leads generated, conversation rates, number of deals closed, and revenue generated.
- **Co-Marketing/Selling Co-Branded Bundled Offering Partnerships**: For each of the Type 3 partnerships, we will provide a Case Study Report that summarizes



- Partnership functioning measures for the given partnership, across regions and states
- LEA experience findings for study-participating LEAs supported by the partnership
- Teacher experience findings for study-participating LEAs supported by the partnership
- Student experience findings and outcomes for study-participating LEAs supported by the partnership
- If relevant and available, exit information from LEAs opting not to continue procuring bundled services.
- The final annual report will summarize results across 4 years

The planned content for the reports is further detailed in Exhibit 7 where alignment with the Foundation's strategy and portfolio reviews is noted.

Exhibit 7: RTI Reports, by Project Year

Report Type and Date	General Content	Intended to Align with Foundation Review							
Project Year 1: November 2024–August 2025									
Intermediary and Research Annual Report June 2025	Baseline data on partnership goals setting, including HQIM-PL reach goals Insights from the partnership development process	August 2025 Portfolio Review							
Supplemental Intermediary and Research Annual Report September 2025	Baseline data on case study LEAs from public sources (demographics, math proficiency rates) Learnings from the first round of interviews/surveys with partners regarding partnership development and health	October 2025 Strategy Review							
Project Year 2: September 2025–August 2026									
Intermediary and Research Annual Report June 2026	Partnership health data, including HQIM-PL reach as reported by partners in February 2026 Current school year teacher survey data and LEA leader and teacher interview/focus group qualitative data	August 2026 Portfolio Review							
Supplemental Intermediary and Research Annual Report September 2026	Partnership health data, including HQIM-PL reach as reported by partners in July 2026 Student survey data from the prior school year LEA baseline data for any new case study LEAs	October 2026 Strategy Review							



Report Type and Date	General Content	Intended to Align with Foundation Review						
Project Year 3: September 2026–August 2027								
Intermediary and Research Annual Report June 2027	Partnership health data, including HQIM-PL reach as reported by partners in February 2027 Current school year teacher survey data and LEA leader and teacher interview/focus group qualitative data Prior school year's student achievement data	August 2027 Portfolio Review						
Supplemental Intermediary and Research Annual Report September 2027	Partnership heath data, including HQIM-PL reach as reported by partners as of July 2027 Student survey data from prior school year LEA baseline data for any new case study LEAs	October 2027 Strategy Review						
Intermediary and Research Annual Report June 2028	Partnership health data, including HQIM-PL reach as reported by partners in February 2028 Current school year teacher survey data and LEA leader and teacher interview/focus group qualitative data Prior school year's student achievement data	August 2028 Portfolio Review						
Supplemental Intermediary and Research Annual Report September 2028	Partnership health data, including HQIM-PL reach as reported by partners in July 2028 Student survey data from the prior school year	October 2028 Strategy Review						
Final Research Report December 2028	Final report, including final student achievement data from the prior school year							



9. References

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