

Power in Partnership: Scaling Curriculum-Based Professional Learning to Strengthen Math Outcomes



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Introduction

A coherent instructional system—where curriculum, high-quality instructional materials (HQIM), professional learning (PL), assessments, and supports are intentionally aligned—is critical for effective teaching and learning. Research shows such coherence reduces variability in instruction, supports consistent use of evidence-based practices, and improves student outcomes (Wang et al., 2024; Aalde & Jensen, 2024; Short & Hirsh, 2021).

Curriculum-based professional learning (CBPL) plays a pivotal role in developing instructional system coherence by translating HQIM into effective classroom practice. When sustained, collaborative, and anchored in curriculum, CBPL builds shared knowledge, improves instructional precision, and aligns educator efforts to student needs (Darling-Hammond et al., 2017). Despite this, many states and districts face barriers to securing CBPL at scale, including limited funding, fragmented procurement, and lack of clear indicators to guide the selection of PL providers (Kaufman et al., 2021; Short & Hirsh, 2021; Nguyen et al., 2019). Staff turnover further disrupts continuity and shared instructional vision. Rural and smaller districts may encounter additional barriers, including limited access to qualified providers and fewer opportunities for sustained, job-embedded learning (Nguyen et al., 2019). Overcoming these challenges requires intentional planning, strategic investment, and stronger mechanisms for connecting districts with aligned, high-quality PL.

Funded by the Gates Foundation and facilitated by RTI, the *Scaling Curriculum Based Professional Learning (Scaling CBPL)* project is designed to test the hypothesis that partnerships between for-profit curriculum publishers and nonprofit PL providers can help address these challenges. Publishers bring reach, market access, and product integration; PL providers contribute deep expertise in instructional practice. Together, they can co-design curriculum-embedded training, streamline procurement, and expand access to high-quality, job-embedded learning—enhancing instructional coherence and accelerating student learning.

This brief explores the potential of such partnerships to address systemic barriers to scaling high-quality, curriculum-based PL. It begins by describing the process for developing and sustaining publisher-provider partnerships, presents key insights into both the challenges and enablers identified through this work, and concludes with recommendations for states, districts, and providers seeking to leverage partnerships to improve instructional coherence and student outcomes.



The *Scaling CBPL* project aims to increase the availability of and access to HQIM in mathematics with aligned PL within our districts and schools to improve outcomes for students.



Develop partnerships to innovate and scale high-quality products and services to leverage and meet local context-specific assets and needs.



Increase adoption of **high-quality instructional materials** and **curriculum-based professional learning services** particularly within the focus states of New York, California, Texas, and Florida, through the establishment of effective and sustainable partnerships.



Sustain engagements between partners to continue offering joint products/services beyond the life of the project.



Generate **actionable insights** and **recommendations** for the field.



Improve **math learning outcomes** for students experiencing poverty, and Black, Latino/a, and/or multilingual students.

Partnership Development Process

Together with our project collaborators (Scaleup Partners, Redstone Strategy team, and the Gates Foundation), RTI has designed and instituted a phased approach to partnership development. From confirming mutual interest to designing joint instructional solutions, developing implementation and risk mitigation plans, and finalizing go-to-market (GTM) strategies, curriculum publishers and PL providers have engaged in a rigorous process to bring coherent instructional systems to four key target markets: California, Texas, New York, and Florida. This structured approach ensures partnerships are strategically aligned, operationally ready, and positioned for sustainable impact.

Partnerships between PL providers and curriculum publishers have been identified and nurtured across four key phases (see [Exhibit 1](#)).

Exhibit 1: Phases of Partnership Development



PHASE 1



Identification of Potential Matches

Partnerships between organizations typically emerge through two primary approaches (see [Exhibit 2](#)). The first approach involves **opportunistic connections**, where relationships form organically through existing networks, serendipitous encounters, or shared participation in events and initiatives. The second approach centers on **data-driven compatibility**, where organizations come together strategically based on comprehensive market analysis, complementary product offerings, target audience overlap, and organizational capacity for forming effective partnerships.

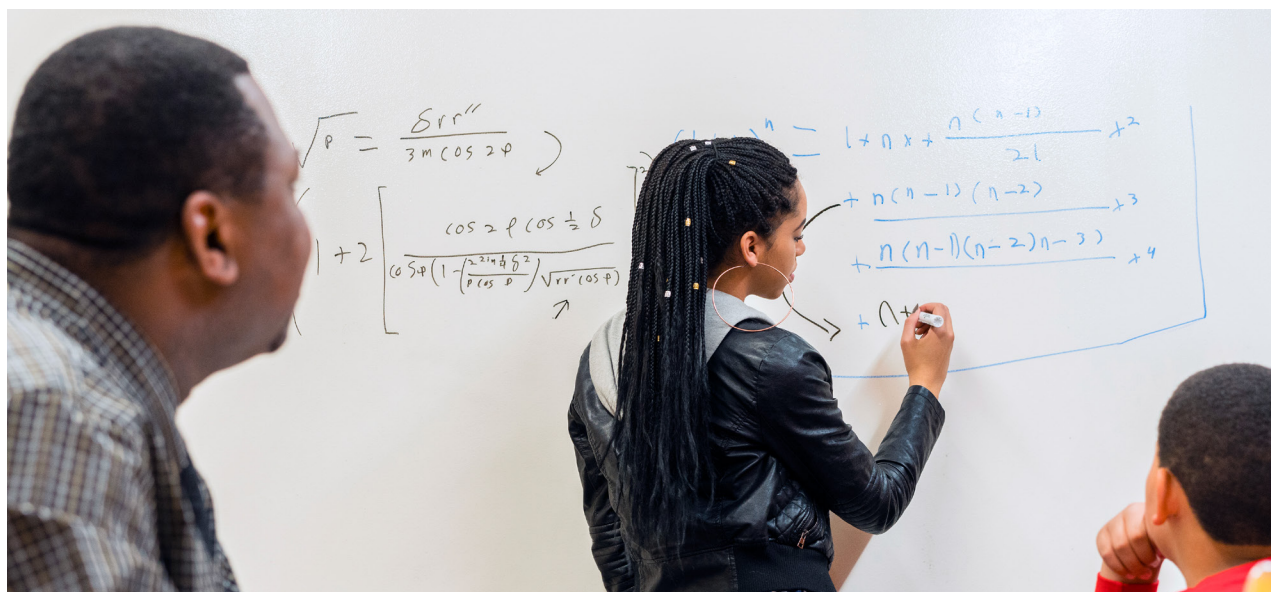
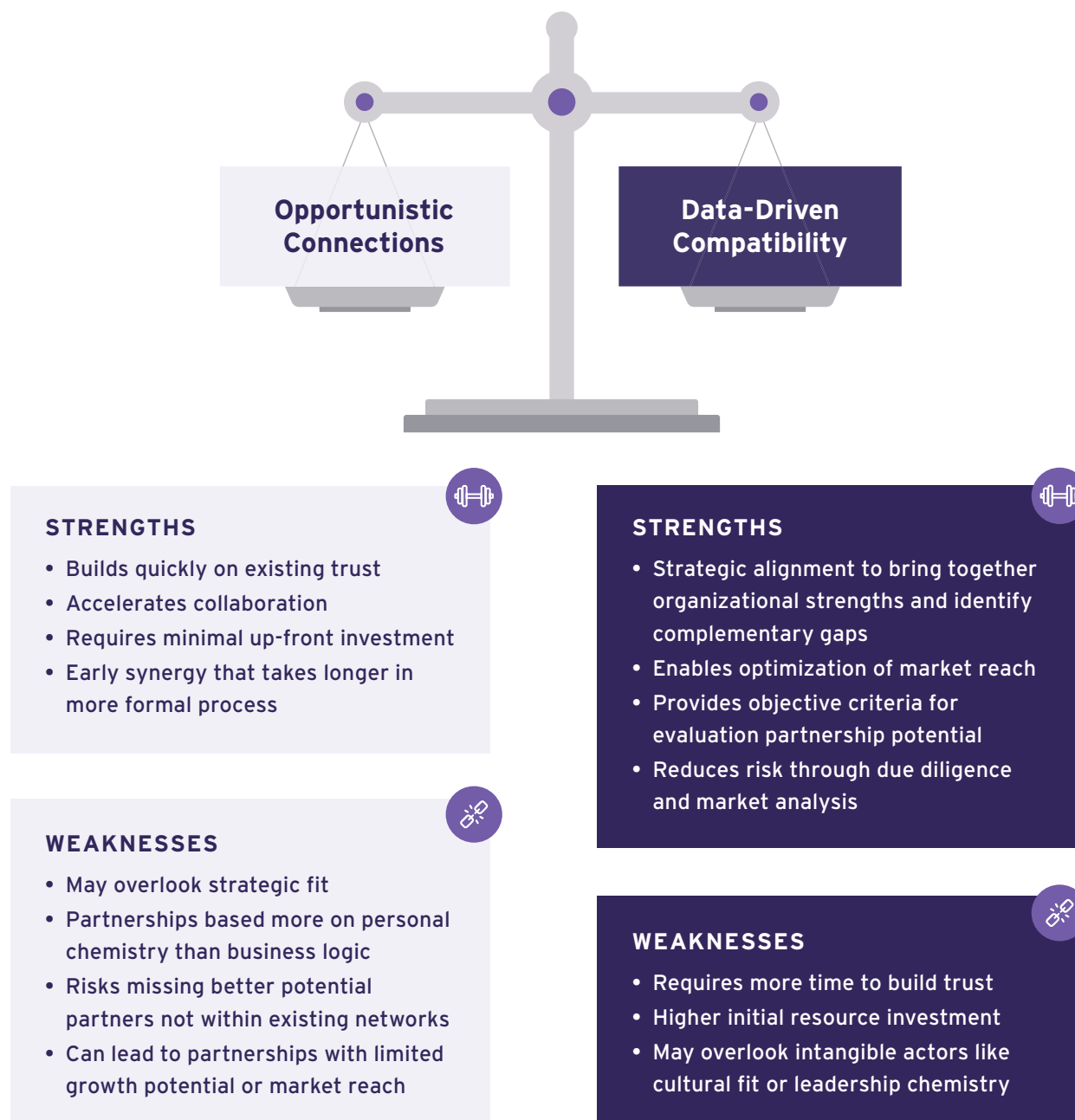


Exhibit 2: Partnership Development Approaches



Although each approach has its own strengths and weaknesses, we adopted the data-driven compatibility approach to initially match PL providers with curriculum publishers because it aligned with our *Scaling CBPL* project goals of optimizing the market reach of coherent solutions for math. This method allowed us to select partners based on complementary strengths, market priorities, and capacity to scale high-quality, curriculum-aligned PL. At the request of the Gates Foundation and Redstone, PL providers and curriculum publishers submitted detailed information on their goals, values, capacity to deliver PL in various formats, geographic market alignment, and other readiness indicators (e.g., mutual interest, experience with curriculum or derivatives, and any prior or current partnerships). This comprehensive profile allowed the team to use data to recommend partnerships that had the strongest potential for success.



Exploration and Fit Assessment

Once we identified potential matches, we moved into the exploration phase using a [partnership evaluation framework](#) to deepen understanding between potential partners and assess compatibility. This stage relied on open dialogue, facilitated by a mutually signed nondisclosure agreement (NDA) to protect proprietary information and enable candid exchange. The framework examined four dimensions of fit:

- **Priorities:** Alignment in strategic vision, market focus, value propositions, and growth objectives.
- **Product:** Complementary or enhancing offerings, high standards of innovation and quality, clear differentiation in the market, and capacity to scale.
- **People:** Leadership vision, relevant expertise, cultural compatibility, collaborative mindset, and openness to innovation informed by practice and research evidence.
- **Geography:** Presence in priority markets, local market knowledge, efficient logistics, and regulatory compliance.

For each dimension, we considered both qualitative fit (e.g., cultural alignment, openness to collaboration) and practical considerations (e.g., market coverage, scalability). Through this process, partners evaluated both the strategic and practical feasibility of working together before committing to a partnership and deeper planning.



Go-to-Market Planning and Minimum Viable Product Development

After Phase 2's compatibility assessments, Phase 3 focused on potential market strategy. The two organizations determined the type of relationship most suitable for their shared goals considering three primary models: lead generation, cross-marketing/selling, and co-marketing/selling with a co-branded bundled offering. [GTM planning](#) expanded on the compatibility analysis by engaging in a concrete process for sharing the unique value of each organization, developing a common understanding of market needs and which markets to target based on organizational goals, coming to consensus on the marketing and sales roles and responsibilities of each partner, determining key performance indicators (KPIs) to measure the success of the partnerships, and co-creating solutions for mitigating risk and solving inevitable challenges.

Partnerships pursuing co-branded bundles collaborated to establish a minimum viable product (MVP), including pricing structures and potential variations. Two fundamental questions anchored the bundle development process: *What problem are we trying to solve?* and *For whom are we trying to solve it?*

Given the flexibility and comprehensive service range of PL providers, initial co-branded bundle concepts were strategically aligned with key market drivers the publisher had identified. Key to this alignment was the PL provider's ability to "productize"—that is, create standardized, named service packages that clearly demonstrated how they typically address the variety of district and school needs. Solutions included building leadership capacity to support mathematics instruction, leveraging artificial intelligence (AI)-enabled PL delivery, and augmenting publisher PL capabilities for scalable implementation. Each proposed solution was designed to address the most critical market needs identified through partner analysis.

Once the bundled offering was defined, partners developed targeted market strategies that included:

- identification of ideal client profiles
- definition of unique value propositions for the MVP
- development of initial marketing and sales channel strategies
- establishment of roles and responsibilities for joint product and service delivery
- implementation of foundational governance processes

Throughout this development phase, partners engaged executive leadership alongside marketing and sales teams to ensure strategic alignment and operational feasibility. Concurrently with product definition activities, the partnerships initiated pilot site recruitment efforts, targeting existing district partners and organizations to provide feedback to refine and enhance the MVP. Given the novelty of this approach to each organization, the GTM plans were aspirational to allow for testing of fit, feasibility, and market receptivity.

Our hypothesis is that **the co-branded bundled offering holds the greatest potential for scaling and sustaining curriculum-based PL**, creating stronger coherence in the delivery of support and maximizing the potential for enhanced teacher, leader, and student outcomes.

PHASE 4



Operationalizing, Testing, and Monitoring (Current Phase)

In Phase 4, the partnerships are transitioning from planning to implementation while actively monitoring the health and viability of each partnership. Partners are refining partnership governance structures, creating client experience maps, and refining KPIs to track progress, measure impact, and guide decision-making. The client experience map outlines who is responsible for key tasks within the partnership—from marketing to sales to implementation—ensuring clarity of roles and seamless coordination across organizations. Risk identification and mitigation remain central, with strategies in place to address potential challenges such as staffing availability, willingness to price offerings at a market-acceptable rate, and being open to feedback from early market testing. Ongoing communication and structured feedback loops enable partners to refine offerings in real time, quickly address emerging issues, and ensure the work stays tightly aligned with shared goals, evolving market needs, and client priorities.

As implementation advances, this phase will continue to generate valuable insights about the conditions, practices, and relationship dynamics that enable partnerships to thrive—insights that directly inform our emerging recommendations for scaling high-quality CBPL.

Actionable Insights and Recommendations

Through the *Scaling CBPL* project, we have identified critical enablers and persistent challenges in building effective partnerships between publishers and PL providers. These insights are organized into thematic areas that shed light on the conditions, processes, and mindsets that support—or hinder—partnership success. Drawing from our experience to date, we also outline actionable strategies to help partners strengthen relationships and continue their work to scale CBPL services and HQIM.

Strategic Alignment

Enablers: Alignment in strategy, enabling conditions, and intended impact of implementation support for teachers and leaders. A common language for describing services, target audiences, and outcomes helps clarify expectations. Shared understanding of context and market needs, coupled with publishers' abilities to identify current offerings and service gaps, enables more targeted collaboration.

Challenges: PL providers' stances on productization or standardization of services can limit the design of a coherent bundled offering. In addition, several PL providers had difficulty articulating how their services are unique or offer a strategic advantage, thus hindering the creation of compelling value propositions.

Recommendations: Develop a shared framework for defining service types, target audiences, and intended outcomes at the start of the partnership. Conduct a joint needs-capacity-mapping exercise to guide bundled offering design and address productization concerns early.

Communication and Trust

Enablers: Transparent sharing of organizational offerings, resources, and demonstrations; refinements based on honest feedback on each other's products; clear roles and responsibilities to build trust; prioritization of time and preparedness in partnership development.

Challenges: Limited capacity to meet regularly and maintain communication between meetings. Although trust may exist among individuals across partnerships, lower organizational-level trust can slow decision-making.

Recommendations: Establish structured communication protocols, including agreed-upon meeting cadence and decision-making processes at both the individual and organizational levels. Use joint work sessions and shared documentation to maintain transparency and accelerate trust-building. Support PL providers in refining and articulating their unique value propositions for the field.

Intellectual Property

Enablers: None.

Challenges: More established PL organizations often have a defined stance on intellectual property (IP) protection. PL providers express concerns about protecting IP when using AI tools and in product development, prompting exploration of contractual terms to mitigate risks.

Recommendations: Co-develop IP protection clauses, including provisions for AI-related use cases, within partnership agreements. Provide a safe mechanism (e.g., controlled demonstrations) for sharing proprietary materials during partnership development.

Pricing and Procurement

Enablers: Exploration of models for a single point of access for procurement of a bundled offering; openness from some partners to co-selling or acting as the payment pathway; interest in helping districts adjust procurement processes to support bundled offerings.

Challenges: Differing perceptions of acceptable PL service costs; varying capacity to define and price PL services as “products”; difficulty scaling pricing based on service intensity; challenges in articulating value-add to justify costs; difficulty reaching affordable price points for smaller districts without supplemental funding; reluctance to adjust existing business models.

Recommendations: Pilot different procurement models (single payment pathway, co-selling) to determine feasibility across varied district contexts. Offer technical assistance to partners in pricing PL as a product, scaling costs appropriately, and communicating value to the Local Education Agency.

Sales

Enablers: Sales teams can ground discussions in specific market realities once an initial offering is defined.

Challenges: PL providers’ desire to remain curriculum-neutral creates challenges for lead generation; lack of clear differentiation limits sales strategy development; incentives for sales teams need to be defined; concerns about the ability of sales teams to sell packaged services with the product are persistent.

Recommendations: Engage sales teams once a clear bundled offering is developed, supported by a shared sales playbook and clear incentives. Define strategies for integrating bundled offerings into existing sales pipelines while respecting curriculum-neutral preferences where needed.

Summary

Through testing this partnership approach, we have learned what it takes to align vision, leverage complementary strengths, and overcome barriers. These lessons can inform future collaborations that expand access, improve coherence, and strengthen outcomes for teachers and students. Sustaining these partnerships will require ongoing trust-building, transparent communication, and adaptive planning. As the work progresses, the emerging lessons offer promising guidance for forging collaborations that maximize impact and advance systemic improvement.

Citations

- Aalde, O., & Jensen, I. S. (2024). Study program leaders' perceptions of coherence and strategies for creating coherent teacher education programs. *Journal of Teacher Education*, 75(3). <https://doi.org/10.1177/00224871231208683>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>
- Kaufman, J. H., Doan, S., Fernandez, M-P. (2021). *The rise of standards-aligned instructional materials for U.S. K-12 mathematics and English language arts instruction: Findings from the 2021 American Instructional Resources Survey*. RAND Corporation. https://www.rand.org/content/dam/rand/pubs/research_reports/RRA100/RRA134-11/RAND_RRA134-11.pdf
- Nguyen, T. D., Pham, L., Springer, M. G., & Crouch, M. (2019). *The factors of teacher attrition and retention: An updated and expanded meta-analysis of the literature*. EdWorkingPaper No. 19-149. Annenberg Institute at Brown University. <https://edworkingpapers.com/sites/default/files/ai19-149.pdf>
- Short, J., & Hirsh, S. (2021, May 7). *How curriculum-based professional learning can boost student outcomes*. Carnegie Corporation of New York. <https://www.carnegie.org/our-work/article/how-curriculum-based-professional-learning-can-boost-student-outcomes/>
- Wang, E. L., Kaufman, J. H., Lee, S., Kim, B., & Opfer, V. D. (2024). *Instructional system coherence: A scoping literature review*. RAND Corporation. https://www.rand.org/pubs/research_reports/RRA279-5.html

For questions or to contact the project team, please email us at ScalingCurriculumBasedPL@rti.org or visit our website at www.scalinglearning.org

This brief is based on research funded by the Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Gates Foundation.