

Realizing California's Vision for Mathematics:

The Role of Curriculum-Based Professional Learning

The High Quality Instructional Materials
Learning Partners Coalition (HQIM-LPC)



Table of Contents

BACKGROUND AND PURPOSE	03
CALIFORNIA’S MATH MOMENT	04
WHAT IS CURRICULUM-BASED PROFESSIONAL LEARNING?	05
MAXIMIZING CBPL IMPACT IN CALIFORNIA	06
A VISION FOR CBPL ACROSS CALIFORNIA	09
CALIFORNIA’S CBPL CALL TO ACTION	13
CONCLUSION	15
FORTHCOMING CBPL RESEARCH & PUBLICATIONS	15



Background and Purpose

The High-Quality Instructional Materials Learning Partners Coalition (HQIM-LPC), formed in 2021, is a statewide coalition of organizations united by a shared commitment to advancing high-quality instructional materials (HQIM) and raising the bar for mathematics education in California. We firmly believe every student deserves access to excellent math education, and our goal is to make this a reality. The organizations in this coalition prioritize expanding access and opportunity for many historically and presently underserved student groups in the education sector, including Black, Latinx/e, and multilingual learner (ML) and English Learner (EL) students.¹ In this paper, we focus on these priority student groups.

The goal of this paper is to support state, county, community, district, charter, and school leaders as they move from adopting HQIM to implementing them effectively in classrooms across California. Building on the growing national research base on curriculum-based professional learning (CBPL), we offer a California-specific vision for strengthening implementation through professional learning that is responsive to the state's unique context, priorities, and student population. In particular, we highlight opportunities to expand existing definitions of high-quality CBPL to better support Black, Latinx/e, and ML/EL students while advancing the vision of the 2023 California Mathematics Framework.² We begin by describing California's current opportunity to maximize the impact of recently adopted instructional materials, outline recommendations for strengthening CBPL, illustrate what this vision looks like in practice through state-specific examples, and conclude with policy priorities and potential funding opportunities to support implementation statewide.

¹ As defined in California Department of Education's (CDE) "[Improving Education for Multilingual and English Learner Students](#)," the term "multilingual learner" (ML) refers to "students who have developed or are developing proficiency in both English and one or more other languages, which may be their home language. Students may be mostly dominant in one language or proficient in both" (CDE, 2020, p. 32). CDE also uses the term "English learner" (EL) to refer to students who are formally (by federal civil rights law) identified as having a home language other than English and levels of English language proficiency that indicate they need programs and services that will support them in becoming English proficient. They are a federally protected class of students with the right to specialized services that enable them to become fully proficient in English and achieve grade-level standards.

² California Department of Education. (2023). [Mathematics framework for California public schools: Kindergarten through grade twelve](#).

California's Math Moment

Following the release of the 2023 Mathematics Framework for California Public Schools (Math Framework),³ California arrived at a long-awaited moment in the fall of 2025: the list of state-approved math instructional materials⁴ was adopted by the California State Board of Education. This was a critical opportunity point for California's students: Leading up to the release of this list, 81% of K–5 students⁵ and 84% of middle school students⁶ were still using materials published in 2018 or earlier. This data point presents a key concern related to the lack of up-to-date supports for teachers and students and the quality of standards alignment. Independent reviews of California's 2014 state-adopted mathematics programs suggest that many would not meet today's expectations for standards alignment: Among the twelve programs on the 2014 state-approved list later reviewed by EdReports, none of them earned the rating for meeting expectations for standards alignment.^{7,8} This pointed to a clear need and opportunity to update, adopt, and implement standards-aligned HQIM to drive student math outcomes.

Over the 2025–26 school year, many districts and charters across California have consequently led materials adoption processes to select new instructional materials aligned with the vision set forth in the Math Framework. This has included processes to review materials for the components called for in “Defining High-Quality Instructional Materials for Mathematics,”⁹ including materials that: (1) are aligned to state grade-level standards; (2) include supports for all students to access grade-level content; (3) include clear guidance to facilitate implementation; (4) are informed by culturally and linguistically sustaining pedagogy; and (5) include high-quality assessments of both content and language. Throughout this process, districts have worked to adopt both standards and Math Framework–aligned materials, as well as HQIM that meet their local priorities and students’ needs.

The observed shift toward adopting up-to-date HQIM that meet local needs and priorities is a promising step to improving math outcomes across the state. Research has shown that high-quality instructional materials can have a major impact on student outcomes¹⁰ and be a transformation tool for equity.¹¹ Materials alone, however, are insufficient to drive the necessary changes in practice that lead to improved student outcomes. Specifically, for materials to reach their full potential in the years ahead, a critical next step in California is aligning professional learning with adopted HQIM to support the effective implementation of these adopted materials.

Furthermore, adopted materials may not yet reflect all recommended research-based practices for supporting ML/EL students and California's diverse learners.¹² In these cases, professional learning that centers students’ assets and needs will be especially crucial to drive effective implementation and instruction.¹³

Based on extant research and evidence, it is clear that California has been presented with the opportunity to strategically support districts across the state with the launch and implementation of newly adopted math HQIM through CBPL. The question for us is: **How are we going to maximize this moment to see the full potential of these materials for all of California's students?**

³ California Department of Education. (2026). *2025 mathematics instructional materials adoption: Adopted Programs*.

⁴ California Department of Education. (2023).

⁵ The Center for Education Market Dynamics. (2025). *California math: Materials access for K–5 students*.

⁶ The Center for Education Market Dynamics. (2025). *California math: Materials access for 6–8 students*.

⁷ California Department of Education. (2026). *2014 mathematics adoption: Programs adopted by the State Board of Education*.

⁸ EdReports. (n.d.). *Math reports*.

⁹ High Quality Instructional Materials Learning Partners Coalition. (2023). *Defining high-quality instructional materials for mathematics: Centering the assets and needs of multilingual learner and English learner students*. EdTrust-West.

¹⁰ Chingos, M. and Russ Whitehurst, G. (2012). *Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the Common Core*. Brown Center on Education Policy at Brookings.

¹¹ Hartl, S. and Riley, C. (March 2021). “High-Quality Curriculum is a Transformation Tool for Equity.” ASCD.

¹² English Learners Success Forum. (n.d.). *Current research on ELs and mathematics education*.

¹³ High-Quality Instructional Materials Learning Partners Coalition. (2026). *Evaluating math materials for equity and access: Findings from the High-Quality Instructional Materials Learning Partners Coalition*. EdTrust-West.

What Is Curriculum-Based Professional Learning?

Recent meta-analyses of research suggests that ongoing professional learning tied directly to instructional materials leads to greater student achievement gains than using the materials on their own.^{14, 15, 16} A 2025 publication on CBPL put forth by a collective of research and professional learning-focused organizations put it clearly: **“HQIM reach their full potential only when teachers have access to CBPL that equips them with the practical skills, research-based strategies, and knowledge to use these resources effectively.”**¹⁷

This collective of researchers, implementation scientists, and professional learning leaders defined CBPL as “high-quality professional learning (HQPL) that supports the implementation and sustained use of specific high-quality instructional materials (HQIM) to ensure that teachers can effectively use these materials in their classrooms.”¹⁸ As a foundation, our coalition supports the ten qualities described in that paper. CBPL is:

Formats and Structures	Characteristics and Content	Implementation	Supportive Conditions
• Collaborative • Supported by Instructional Coaches • Intensive and Sustained	• Supportive of Teachers in Meeting Individual Student Needs • Grounded in Practice	• Staged Over Time • Focused on a Balance Between Fidelity and Adaptation	• Supported by Measurement for Improvement and Impact • Driven by Effective Leadership • Anchored in a Shared Instructional Vision

Furthermore, in order to drive effective implementation of these math materials in California, we also call for the expansion of the aforementioned qualities of CBPL to fully meet the needs of California’s Black, Latinx/e, and ML/EL students, and accelerate their math achievement. We believe that strong CBPL must explicitly address teacher mindsets around students’ assets, promote culturally and linguistically sustaining pedagogy aligned with materials, and strengthen teacher capacity to support mathematical language development and meaningful mathematical discourse in line with California’s vision for multilingual education. In the sections below, we further elaborate on these expanded qualities and the vision for CBPL across California.

¹⁴ Lynch, K., Hill, H. C., Gonzalez, K. E., & Pollard, C. (2019). [Strengthening the Research Base That Informs STEM Instructional Improvement Efforts: A Meta-Analysis](#). Educational Evaluation and Policy Analysis, 41(3), 260–293.

¹⁵ Novicoff, S., & Dee, T. (2025). [The Achievement Effects of Scaling Early Literacy Reforms](#). EdWorkingPaper: 23-887. Annenberg Institute at Brown University.

¹⁶ Taylor, J. A., Getty, S. R., Kowalski, S. M., Wilson, C. D., Carlson, J., & Van Scotter, P. (2015). [An Efficacy Trial of Research-Based Curriculum Materials with Curriculum-Based Professional Development](#). American Educational Research Journal, 52(5), 984–1017.

¹⁷ Alicea, S., Davis, C., Foster, E., Hornak, R., Hyler, M., Morrison, A., Papay, J., Richardson, J., Schwartz, N., & Wechsler, M. (2025). [Defining Curriculum-Based Professional Learning: Building a Common Language](#). Research Partnership for Professional Learning.

¹⁸ Alicea, S., et al. (2025).

Maximizing CBPL Impact in California

To drive effective curriculum implementation and instruction in California, where approximately 19% of students are categorized as English Learners¹⁹ and over 60% of students are Black or Latinx/e,²⁰ we make five recommendations to expand upon the ten qualities of CBPL. We put forth this comprehensive vision of CBPL, which centers the assets and needs of our diverse student population, as a guide for local CBPL planning and a source document for regional, statewide, and policy initiatives. CBPL in California should:



(1) Address educator mindsets

Recommended Addition to “Characteristics and Content” for California

CBPL should reinforce the beliefs of educators (e.g. teachers, site leaders, paraprofessionals) that all students can meet grade-level expectations. CBPL should also help educators recognize and build on students' assets, particularly those students from historically underserved backgrounds and communities. Coaches, site leaders, and other professional learning providers should continue to model and support these mindsets through ongoing CBPL. Effective CBPL should help teachers leverage the coherent instructional design and built-in scaffolds and supports in HQIM to provide access to rigorous, grade-level learning while maintaining high expectations for every learner. By focusing on discourse, collaboration, and student thinking, teachers create affirming mathematics classrooms that foster positive mathematical identities and support students in engaging with and persisting through challenging work.



(2) Promote culturally and linguistically sustaining pedagogy aligned with materials

Recommended Addition to “Characteristics and Content” for California

As we noted in our publication “Defining HQIM for Mathematics,” HQIM should be informed by, and responsive to, the research on culturally responsive teaching, culturally relevant pedagogy, and linguistically responsive teaching. While there has been significant progress in the presence of these components in instructional materials, there still exists vast heterogeneity in current materials' ability to do this well. Given this reality, it is even more crucial for quality CBPL to address any gaps in the materials and speak to the adaptations needed to consistently meet the needs of culturally and linguistically diverse students in alignment with the Math Framework.

Research highlights that effective and timely professional learning prepares educators to deliver culturally responsive and differentiated instruction that affirms students' identities while addressing their academic and social needs.^{26, 27, 28} Building these instructional strategies in line with the materials they are preparing to teach helps all educators who develop students' mathematical proficiency to create more affirming and meaningful learning environments and to support positive math mindsets and identities that lead to student success. As with all CBPL, this investment in building adults' expertise with implementing materials-aligned, culturally and linguistically sustaining pedagogy should be consistently used over time and support them in meeting individual student needs.

¹⁹ California Department of Education (Fall 2022). [Facts about English Learners in California](#).

²⁰ California Department of Education. (2026). [Fingertip facts on education in California](#).

²¹ High-Quality Instructional Materials Learning Partners Coalition. (2026). [Evaluating Math Materials for Equity and Access: Findings from the High-Quality Instructional Materials Learning Partners Coalition](#). EdTrust-West.

²² Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory Into Practice*, 34, 159-165.

²³ Hammond, Z. L. (2014). *Culturally Responsive Teaching and the Brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.

²⁴ Hollie, S. (2017). *Culturally and Linguistically Responsive Teaching and Learning*. Shell Education.

²⁵ High-Quality Instructional Materials Learning Partners Coalition. (2026).

²⁶ Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press

²⁷ Hammond, Z. (2014).

²⁸ Ladson-Billings, G. (1995).



(3) Align with California's vision for multilingual education

Recommended Addition to “Characteristics and Content” for California

Given the state's significant ML/EL populations, it is critical that all CBPL attends specifically to the needs and assets of these students in relevant school pathways. Principle Two of California's English Learner Roadmap calls for language development to occur “in and throughout subject matter learning” and to be “integrated into instruction across the disciplines.”²⁹ Additionally, Principle Three emphasizes the need for coherence across the educator development continuum, calling for teacher preparation and ongoing professional learning that build educators' capacity to provide rigorous, asset-based instruction responsive to MLs.³⁰ All CBPL should include guidance around integrated English Language Development (ELD), in alignment with California's Math Framework and EL Roadmap, as a non-negotiable component.³¹ Furthermore, as a state with one of the largest and most developed Dual-Language Immersion systems in the country with over 1200 public schools offering at least one language immersion program,³² CBPL can also further maximize its impact by attending to strategies for math instruction in multiple languages, including sustaining the use of students' home languages and explicitly taught and modeled translanguaging strategies.



(4) Strengthen educator capacity to support mathematical language development and discourse

Recommended Addition to “Characteristics and Content” and Extension of “Implementation” for California

In addition to establishing integrated ELD as a core component of CBPL, professional learning should explicitly strengthen educators' professional knowledge and capacity to enact these practices within the context of their instructional materials. High-quality CBPL should help them identify the language demands embedded in mathematics lessons, including discipline-specific vocabulary and language structures, and distinguish between everyday and mathematical uses of key terms. CBPL should also support them in guiding instruction around explicit language objectives alongside mathematical learning goals, and sequencing language supports across units so students have repeated opportunities to develop and refine mathematical language over time in a supportive learning environment.³³ In dual-language program contexts, this should include attention to the distinct instructional and linguistic opportunities for teachers and students in dual-language programs.

To expand on the quality of “focus on a balance between fidelity and adaptation,” effective CBPL in California should further prepare educators to facilitate mathematics instruction that provides multiple, meaningful ways for multilingual learners to engage with rigorous content. This includes preparing to implement or adapting tasks in order to facilitate rich student-to-student mathematical discourse that promotes equitable participation regardless of English proficiency, and implementing scaffolds that amplify rather than simplify the language demands of grade-level mathematics.

²⁹ California Department of Education. (n.d.). [English Learner Roadmap Principle Two: Intellectual quality of instruction and meaningful access](#).

³⁰ California Department of Education. (2017). [English Learner Roadmap Principle Three: System Conditions that Support Effectiveness](#).

³¹ EdTrust–West. (2026). [Changing the Equation: Bold Ideas to Transform Math Learning for Multilingual Learners](#).

³² Hill, L., & Deng, B. (2025, August 19). [Adapting to changes in California's English learner population](#). Public Policy Institute of California.

³³ High-Quality Instructional Materials Learning Partners Coalition. (2026).



(5) Support continuous improvement through ongoing, job-embedded professional learning

Recommended Extension of “Formats and Structures” and “Supportive Conditions” for California

Finally, high-quality CBPL should extend beyond one-time workshops and instead provide educators with sustained, tailored job-embedded opportunities to strengthen instructional practice over time. Consistent with the research underpinning Chapter 10 of California’s Math Framework, professional learning should be viewed as a continuous process that supports teachers as they implement curriculum, analyze student thinking, refine instruction, and respond to their evolving needs as well as those of their students.³⁴ Ongoing learning experiences enable educators to move beyond initial curriculum orientation toward deeper instructional expertise and continuous improvement.

The Math Framework highlights a range of complementary structures that can support ongoing CBPL, including instructional coaching, professional learning communities (PLCs), collaborative lesson planning, lesson study, peer observation and feedback, and cycles of inquiry grounded in student work.³⁵ Rather than relying on a single delivery model, CBPL should leverage these interconnected approaches to create coherent systems of support that foster collaboration, reflection, and instructional refinement. Embedding professional learning within the workday not only strengthens curriculum implementation with greater integrity and responsiveness but also builds collective educator expertise that can be sustained long after initial curriculum adoption. Recent California data reinforces the need for this kind of differentiated professional learning in particular to support the success of multilingual learners, working together to build educators’ capacity to implement rigorous, language-rich mathematics instruction.³⁶

To support this continuous improvement process, districts can draw on shared measurement tools designed to monitor CBPL implementation and inform adjustments over time.³⁷ Setting up systems to track implementation quality and progress will support continuous improvement by enabling data-informed decisions about where to strengthen support.

³⁴ California Department of Education. (2023). [Chapter 10: Supporting educators in offering equitable and engaging mathematics instruction](#). In Mathematics framework for California public schools: Kindergarten through grade twelve.

³⁵ California Department of Education, Mathematics Framework, Chapter 10.

³⁶ EdTrust–West. (2026).

³⁷ Research Partnership for Professional Learning & EdInstruments. (2025). [Assessing ELA and Math Curriculum Shifts: A Practical Guide for Measurement and Progress Monitoring](#).

A Vision for CBPL Across California

Our vision for California is that state, regional, and local leaders align around a shared strategic plan that establishes the system-level conditions necessary for effective implementation of math HQIM, including sustained investment in CBPL. As illustrated in the spotlight below, student math learning accelerates when leaders come together to align around purposeful systems for collaboration, professional learning, and coaching to support the implementation and sustained use of instructional materials.³⁸

Imagine this: An experienced teacher begins the year at a large school district in California. They’ve been teaching for many years, and the instructional approach of their newly adopted math instructional materials is aligned to the vision set forth in California’s Math Framework,³⁹ but it is a big instructional shift for them.

In the past, when this district adopted new materials, the teachers received at most a few days of launch training at the beginning of the school year, and then were left to figure out the implementation of materials on their own. Their principal came into their classroom for their once yearly scheduled observation, but they never received any further support, coaching, or direct feedback about use of the materials themselves. The principal never deeply understood the materials; only teachers were included in the last rollout training on instructional materials. Over time, the teachers stopped using the materials, putting them on a shelf, and spent hours a week searching for their own materials online.

Now, their district has put a plan in place to move from successful HQIM adoption to effective implementation. The plan attends both to the design and delivery of high-quality CBPL and to the system-level enabling conditions—including the shared vision, leadership, time, support and collaboration structures, and data and measurement—that allow CBPL to take hold and translate into changes in instructional practice. The plan is as follows:



Pre-Launch Foundational Training

In the year prior to adopting new HQIM, district leaders brought together mathematics content and language development expertise across departments and established a partnership between their local County Office of Education (COE) and California Math Project (CMP) to ensure that all teachers of math and school-site leaders in this district received professional development. This professional development focused on helping educators understand the shifts called for in the Math Framework, including the shift toward more inquiry-based instruction that allows for productive struggle, and facilitating strong math discourse. These trainings supported a preview of and preparation for the instructional shifts that would come with their newly adopted materials.

³⁸ Partnership for Los Angeles Schools. (2026). [From Adoption to Impact: Leading Equitable Implementation of High-Quality Math Instructional Materials in LAUSD](#).
³⁹ California Department of Education. (2023). [Mathematics framework for California public schools: Kindergarten through grade twelve](#).



A Strong Adoption Process to Select HQIM

When the new adoption process began, the teachers and other coaches and leaders from school sites and the district had an opportunity to lead their district's materials selection process by participating in the Math Adoption Committee, which included developing culturally and linguistically responsive criteria for their district's review rubric,⁴⁰ and then deeply reviewing materials in line with their district's math instructional vision and foundational components of HQIM.⁴¹ Given the district's significant population of ELs and MLs, the committee prioritized final contender materials that highlighted culturally and linguistically responsive instructional practices, including mapping and assessing language alongside content development, purposeful collaboration and conversation, and sustaining home languages. Following an opportunity to pilot their final two instructional materials options, the Math Adoption Committee participated in a consensus process that led to the ultimate selection of materials.



Initial Training Grounded in the Materials & Focused on Mindsets

At the launch of the new materials in August of year one of implementation, all teachers, school site leaders, and district instructional coaches participate in role-specific training. Their CBPL begins by aligning all participants around the mindset that all students can meet the grade-level expectations of the materials. This training lays the foundation for successful implementation by unpacking how initial lessons will support establishing affirming mathematics classrooms that foster positive mathematical identities.

Teachers and the coaches who will support them understand which components of the materials to sequentially focus on implementing with integrity, beginning with the core launch routine in the first semester. In collaboration between the publisher and district student support specialists, teachers and leaders also dive deeper into the materials to ensure they will meet the needs of their specific student populations, including culturally and linguistically diverse students. To do this effectively, educators intentionally integrate students' funds of knowledge⁴² - the distinct cultural and community-based knowledge and skills students bring to the classroom⁴³ - which benefits all students,⁴⁴ and particularly Black, Latinx/e and ML/EL students. Recognizing that these community-acquired assets can differ from standard academic prior knowledge, teachers ensure lessons use appropriate scaffolds that connect to students' cultural backgrounds, allowing all students to access grade-level instruction and supporting both mathematics and language development.



Ongoing Observations & Coaching Grounded in the Materials

District leaders establish supportive structures for effective implementation through regular observations to inform coaching and professional learning, and coaches provide one-on-one ongoing tailored support to teachers, grounded in the materials. School-site leaders are supported by a district-wide cohort focused on the effective implementation of instructional materials. Once a month, school site leaders engage in walkthroughs in their own buildings to observe implementation of the materials. The monthly school site walkthroughs are followed by observation walks every other month with leaders across sites to calibrate on implementation and priority areas of support, and to discuss problems of practice arising for their teachers in order to best meet the needs of their students.

Teachers understand the look-fors related to implementation in these walkthroughs because they directly connect with the instructional routine priorities named during the August training, and were reinforced through school-site professional development prior to the start of routine leader walkthroughs. Standardized walkthrough and feedback routines create a common framework for teachers, leaders, and coaches to develop a shared understanding of implementation across the district rollout and support more focused conversations about instructional practice.⁴⁵ These routines also create a clear foundation for follow-up support from their school site leaders or local coaches. In follow-up with the dual-language immersion teachers, coaches maximize their impact by attending to strategies for math instruction in multiple languages, including sustaining the use of students' home languages.

⁴⁰ CalCurriculum. (2022). *Criteria for Review of Instructional Materials' Success in Addressing MLL Linguistic and Instructional Needs*.

⁴¹ High Quality Instructional Materials Learning Partners Coalition. (2023).

⁴² Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). *Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms*. *Theory Into Practice*, 31(2), 132–141.

⁴³ National Council of Teachers of Mathematics. (2023). *The Intersection of Culture and Mathematics*.

⁴⁴ UnboundEd. (2025). *Planning with Funds of Knowledge*.

⁴⁵ Alicea, S., Boguslav, A., Davis, C., Papay, J., Porter, L., Sundar, P., Schwartz, N., & Tolani, N. (2026). *Designing Effective Curriculum-Based Professional Learning: Insights from a Cross-Study Portfolio*.



Structures & Collaboration to Support Implementation

All educators who develop students' mathematical proficiency understand their role in the connected system of effective implementation as a result of clear expectations laid out at launch, and strong ongoing routines and systems of communication. District and school leaders create the conditions to support effective implementation, including aligning school schedules to enable PLCs within grade-level teams at the elementary schools, and cross-school collaboration among same-course teachers at the secondary schools. These schedule adjustments also allow for specialists that support math instruction, such as special education teachers and ELD teachers, to collaboratively plan instruction that supports math achievement for all students.

During these regularly occurring PLCs, teachers engage in unit unpacking, lesson study, and data analysis of student work. They collaborate through structured routines (e.g. lesson study, protocols for analyzing student work) to support collective decision-making about concrete next steps from instruction.⁴⁶ The teacher leaders who lead these communities have been trained and are supported by coaches or site administrators to facilitate these meetings. As PLCs prepare for each unit and lesson, they use the universal design for learning (UDL) framework to identify the guidance and supports within the adopted materials for diverse learners, including how to support their ELs with math and language development.⁴⁷ Following formative and summative assessments, they engage in disaggregated data analysis to examine performance across student subgroups, and subsequently identify appropriate supports in the materials for priority student groups.



Ongoing Feedback & Communication to Support Continuous Improvement

Teachers are periodically engaged about their implementation experiences and beliefs about the materials. Their leaders regularly review this feedback and use the findings to inform ongoing supports. The district and schools partner with their county office, or an outside technical assistance provider, to receive ongoing implementation support. Throughout the remainder of year one of implementation, this team of internal and external experts leads additional in-service days of CBPL differentiated by role and teacher experience level, coupled with ongoing observations, coaching, and feedback. In these follow-up in-service days, their CBPL goes deeper into preparing to implement or adapt tasks in order to facilitate rich student-to-student mathematical discourse that promotes equitable participation regardless of English proficiency and implementing scaffolds that amplify rather than simplify the language demands of grade-level mathematics. In these sessions, they address how to deliver culturally and linguistically sustaining pedagogy through the foundation of their HQIM.

The teachers receive clearly communicated expectations about the balance between implementing the materials with integrity, alongside structured guardrails around adaptation to meet student needs and using data to inform those decisions.⁴⁸ These expectations align with the district's math instructional vision, or "north star." The district establishes sustainable systems to measure and monitor the implementation of their HQIM and CBPL over time, examining indicators such as educator knowledge and beliefs, use of the materials, instructional practice, and students' learning experiences, as well as longer-term student outcomes.⁴⁹ Leaders use this evidence to identify what is working, determine where educators need additional support, and adjust CBPL and implementation strategies over time. As the district sustains its focus on CBPL over the first few years, these measures provide evidence of progress along the implementation pathway—including stronger use of the materials and changes in classroom practice and student learning experiences—and, over time, improvements in student outcomes.⁵⁰

⁴⁶ Alicea, S., et al. (2026).

⁴⁷ EdTrust–West. (2026).

⁴⁸ Alicea, S., et al. (2026).

⁴⁹ Research Partnership for Professional Learning. (2025). [Assessing ELA and math curriculum shifts: A practical guide for measurement and progress monitoring](#). EdInstruments.

⁵⁰ Research Partnership for Professional Learning. (2025).

This is our vision for the next phase of work in California, and this spotlight demonstrates what's possible:

California CBPL Spotlight: The Partnership for Los Angeles Schools in partnership with Los Angeles Unified School District⁵¹

In 2015, the Partnership for Los Angeles Schools began a collaboration with Los Angeles Unified School District (LAUSD) to pioneer and expand curriculum implementation practices across the district for recently adopted HQIM. This partnership has demonstrated how sustained investment in HQIM along with CBPL can improve mathematics outcomes.

The Partnership for Los Angeles Schools and LAUSD paired HQIM with a vision for CBPL that included instructional coaching, collaborative professional learning, leadership development, and implementation systems designed to support teachers over time.⁵² Over the following decade, math proficiency across Partnership schools nearly doubled, with most campuses seeing double-digit gains in student proficiency within four years of implementation. These efforts have demonstrated impact broadly and on priority student groups. For example, from SY23–24 to SY24–25, they saw a 22 point increase in distance from the standard for Black students in middle grades at schools that were engaged in CBPL.

Their work illustrates the recommendations outlined throughout this paper: CBPL is most effective when it is ongoing, embedded within collaborative implementation systems, and supported by leaders who align coaching, feedback, and continuous improvement around a shared instructional vision.

“HQIM are only as powerful as the systems, people, and practices that bring them to life. **The question for school and district leaders is not simply what to adopt, but how to implement with depth, coherence, and integrity so that all students, especially those historically underserved, experience math as meaningful, rigorous, and empowering.**”

— Partnership for Los Angeles Schools

⁵¹ Partnership for Los Angeles Schools. (2026).

⁵² Guerrero, G., & Umland, K. (2026). Findings Offer a Math Playbook for California Schools. The 74 Media.

California's CBPL Call to Action

To achieve this vision for California, there need to be sufficient structures, funding, and coordination to support the CBPL needed to maximize HQIM implementation impact. Similar policy priorities have been named previously by leading state organizations in relation to the rollout of the Math Framework,⁵³ and we outline our proposed expanded policy priorities and potential funding sources to support this work below.

POLICY PRIORITIES

We call for the following state-level policy priorities to support educators across California with the next phase of implementing HQIM through strong systems for CBPL:

- Staff and train expert advisors and coaches to lead CBPL to support implementation of recently adopted HQIM, including student-centered teaching strategies outlined in the Math Framework, to strengthen core Tier 1 instruction and advance equitable access and support for all students. In particular, determine how materials attend to the needs of California's culturally and linguistically diverse students.
- Leverage COEs and the CMP to consult and support CBPL for educators, including coaches and administrators
- Ensure that CBPL systems explicitly address the instructional and linguistic needs of ML/EL students, including training in asset-based pedagogy, integrated ELD, and the use of HQIM that sustain students' cultural assets and home languages.⁵⁴
- To address the barrier of time needed to engage in CBPL, we affirm the need to reexamine school schedules and staff time to create more opportunities for math professional development and collaboration, consistent with collective bargaining agreements.⁵⁵
- To address the barrier of more curriculum-based feedback and support needed to implement successfully, we propose staffing and training more expert advisers and coaches to partner with school and district leaders to increase the frequency of walkthroughs and observations, paired with coaching conversations and feedback grounded in the instructional materials, in line with collective bargaining agreements.

In line with the prior policy priorities related to the Math Framework rollout,⁵⁶ we affirm the continued need for strong math instructional coaching to support CBPL across California. Being supported by instructional coaching is one of the key requirements of effective CBPL, and research has also demonstrated that embedding expert math coaches in school leadership roles can lead to stronger instructional practice and measurable improvements in student achievement.⁵⁷ To align coaching with effective coaching practices, we recommend using a research-based taxonomy of observable moves within coaching conversations to provide coaches and coaching leads with a shared language for planning, reflecting on, and improving coaching quality.⁵⁸

⁵³ Willis, L., & Darling-Hammond, L. (2025). High-Quality Professional Development to Support Instructional Materials Adoption Aligned with the New Math Framework. Learning Policy Institute and California School Boards Association.

⁵⁴ EdTrust–West. (2026).

⁵⁵ Willis, L., & Darling-Hammond, L. (2025).

⁵⁶ Willis, L., & Darling-Hammond, L. (2025).

⁵⁷ Campbell, P. F. & Malkus, N. N. (2011). The impact of elementary mathematics coaches on student achievement. *The Elementary School Journal*, 111(3), 430–454.

⁵⁸ Boguslav, A. (2025). Coaching Moves Framework: Building a Common Language for Facilitating Coaching Conversations. Research Partnership for Professional Learning.

POTENTIAL FUNDING SOURCES

To build on prior sources of state funding⁵⁹ and existing statewide networks for the Math Framework rollout, we also highlight the more recent statewide initiatives that could fund research and provide resources to support county and district leaders with CBPL, as well as networks to develop mathematics coaches:

- Section 90 of Assembly Bill 121, the Education Omnibus Budget Trailer Bill for the 2025–26 California State Budget, appropriated \$7,500,000 for the California Collaborative for Educational Excellence (CCEE) to administer, in consultation with the California Department of Education (CDE), a Statewide Mathematics Network, convening mathematics leads to support statewide implementation of evidence-based practices. To support the overall goals for CBPL in California, we recommend that these mathematics leads be strongly grounded in practice, as well as mathematics content and language development.
- Section 114 of Senate Bill 153, the Education Omnibus Budget Trailer Bill for the 2024–25 California State Budget, and Section 95 of AB 121, the Education Omnibus Budget Trailer Bill for the 2025–26 California State Budget, authorized a total of \$50 million to the MPLP Grant Program. In addition, the 2026–27 enacted budget added another \$50 million, bringing the state's investment in the initiative to a total of \$100 million. This program builds capacity for mathematics coaching, teaching, and leadership so that all California students in grades kindergarten through grade twelve (K–12) may have access to high-quality mathematics instruction.
- The 2026–27 enacted budget also includes a \$2.8 billion one-time Student Support and Professional Development Discretionary Block Grant for LEAs. While flexible in its use, the state specifically identifies professional learning aligned to the California Math Framework as an intended use of these funds. Districts can leverage these discretionary funds to invest in CBPL, mathematics coaching, and implementation supports that strengthen HQIM.

Other sources of state funding related to the Math Framework rollout that might still be utilized have included:⁶⁰

- Learning Recovery Emergency Block Grants
- Utilizing funding through the CMP in partnership with COEs, now more commonly known as the Mathematics Professional Learning Partnership (MPLP) grant program, led by the Kern County Superintendent of Schools
- California Mathematics, Science, and Computer Science Partnership (CAL-MSCS) led by Santa Barbara, San Joaquin, and Monterey COEs
- California Early Math Initiative (CAEMI or Count Play Explore) led by Fresno COE
- Learning Acceleration System Grant led by Santa Clara, Lake, and San Diego COEs

Alongside making strategic investments through these funding opportunities, California has an opportunity to learn systematically from how these investments are implemented across districts and regions. We recommend creating statewide or regional structures to examine what is working, for whom, and under what conditions. These structures can help surface and share promising practices and evidence of progress and impact, allowing districts and the state to learn from one another and strengthen future CBPL investments.

⁵⁹ California Department of Education. (n.d.). Mathematics: State investments.

⁶⁰ Willis, L., & Darling-Hammond, L. (2025).

Conclusion

California's investment in new mathematics instructional materials represents an essential first step to improving math teaching and learning statewide, but the promise of these materials will be realized only through an equally ambitious investment in CBPL focused on the assets and needs of California's students. The recommendations in this paper provide a roadmap for state, regional, county, district, and school leaders to build the systems, partnerships, and sustained supports necessary for successful implementation in California. By acting together, we can build the conditions to ensure that every student, especially those who have been historically underserved, experiences rigorous and affirming mathematics learning. In this vision for CBPL in California, we can ensure HQIM become catalysts for excellent instruction, equitable opportunities, and stronger mathematics outcomes for every student.

Forthcoming CBPL Research & Publications

Several national research efforts underway at the time of this publication in September 2026 will deepen the field's understanding of CBPL and the conditions needed to support effective implementation of HQIM. These efforts are complementary: Together, they can help the field better understand what CBPL currently looks like, how CBPL and HQIM implementation are evolving in practice, and how to measure implementation and its relationship to teacher and student outcomes. The findings from these efforts can help inform future investments, strengthen implementation supports, and identify areas where additional research is needed.

Center for Education Market Dynamics: Understanding the Current State of Professional Learning

Estimated release Fall 2026

[The Center for Education Market Dynamics](#) (CEMD), drawing from thousands of district artifacts, will provide an analysis of professional learning contracts from across the country. In collaboration with the Research Partnership for Professional Learning (RPPL), CEMD has developed a data framework for categorizing and understanding professional learning practices, including those associated with CBPL. The results of this analysis will shed light on what types of professional learning districts purchase and from whom—building a shared understanding of the current state and areas for growth.

RTI International: Scaling Curriculum-Based Professional Learning to Strengthen Math Outcomes

Ongoing releases in a continuing study, beginning Fall 2025

[RTI International](#) is leading a [project](#) with a cohort of PL providers, publishers, and districts to study CBPL partnerships and strategies to increase the availability and access to HQIM in mathematics with aligned PL to improve student outcomes. Recently released products include a [Partnership Development Brief](#), a [report on partnership formation](#), and a [Year 1 data story](#) highlighting how curriculum publishers and professional learning providers use feedback loops to strengthen collaboration and improve implementation support for districts. Together, these efforts will provide insight into how CBPL is implemented in practice and how cross-sector partnerships can support scaling access to CBPL.

WestEd: Measuring HQIM Implementation and Impact

Ongoing study between 2024–2027

[WestEd](#) is conducting a nationwide study of the implementation and impact of high-quality instructional materials in mathematics. Their [Measuring What Matters](#) report identifies challenges in measuring HQIM implementation and describes how the research team is addressing those challenges through the larger study. The resulting research will contribute to the field's understanding of how to measure HQIM implementation and its relationship to changes in teacher practice and student outcomes. The report is the first in a series of publications from the study.