rppl Research Partnership for Professional Learning

Defining Curriculum-Based Professional Learning: Building a Common Language

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RIVET EDUCATION

Purpose of This Paper

- Establish a common vocabulary and clear description of the core features of instructionally focused teacher professional learning (PL) for the field.
- Ensure that everyone working in teacher professional learning shares a common understanding and application of these core aspects.

Acknowledgment Statement

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Introduction

Spurred by shifts in state standards and waves of legislation, school systems across the country are adopting and implementing new curricular materials. Policymakers expect that such changes will raise expectations for student learning, center best practices in instructional design, and support teachers with robust materials aligned with state content standards. However, mounting evidence suggests that the adoption of new high-quality instructional materials (HQIM) is an insufficient tool for improving classroom teaching unless coupled with equally high-quality curriculum-based professional learning (CBPL).

Emerging research highlights the importance of providing teachers robust opportunities to engage with these materials, to build shared understandings of the goals, and to directly practice lesson strategies using newly offered curricula. Meta-analyses of research suggest that pairing PL with curricular materials leads to greater student achievement gains than either curriculum or professional learning (PL) alone (Davis et al., 2017; Lynch et al., 2019; Taylor et al., 2015). More directly, a recent study of a large-scale shift in literacy materials in California showed the promise of an approach focused on CBPL, finding significant gains from an initiative that thoughtfully paired curriculum shifts with substantial PL investments (Novicoff & Dee, 2025).

Despite the momentum in the field around CBPL as a key area of focus, the bounds of the concept and what it actually means in practice remain blurry. The lack of a shared knowledge base and vocabulary makes this work more challenging (Chu et al., 2022). Surface-level consensus around need is insufficient to guide the districts and PL provider organizations building programs of study for teachers and leaders. Even the terms themselves can be a source of misalignment, with different actors using different descriptors for effective materials and PL opportunities.

Here, we take up this challenge, seeking to provide a common framework and vocabulary to inform and guide practitioners in their design, implementation, and assessment of strong PL programs, specifically for teachers. We look to understand what we know about high-quality professional learning (HQPL) broadly, as well as its application to specific curricular materials. Much as districts that adopted common frameworks for teaching helped align conversations about instructional practice among educators in their district, we hope this paper can provide a common understanding of effective PL and a common vocabulary. By aligning on key elements and key terms, districts, providers, researchers, and practitioners can drive opportunities to share practice and promote ongoing learning.

Ultimately, our goal is to enhance the collective impact of PL, driving continuous improvement and impact that cultivates positive outcomes for every teacher and student. This unified approach can not only streamline efforts but also foster a culture of continuous growth and shared expertise across the PL ecosystem, benefiting teachers and students alike.

Defining Curriculum-Based Professional Learning and Related Terms

While HQPL can and should be offered for a variety of educator roles (e.g., school and system leaders, instructional coaches, support staff), this paper focuses on instructionally focused PL specifically for teachers (i.e., CBPL).

High-quality professional learning (HQPL) provides educators with evidence-based and relevant learning opportunities that directly improve teaching effectiveness and student learning outcomes. It often includes active engagement, collaboration, and continuous feedback, and balances institutional goals and educators' and students' needs.

High-quality instructional materials (HQIM) or high-quality curricular materials (HQCM) are vetted and organized around a clear scope and sequence that includes specific learning goals and sets of standards-aligned, detailed lessons and unit plans that provide teachers with clear guidance and content to facilitate effective teaching and learning. They use research-based teaching strategies that focus on student-centered approaches to learning and include teacher support materials and embedded formative assessments. They are typically comprehensive sets of curricular materials to guide instruction in a subject throughout the year.

Curriculum-based professional learning (CBPL) is HQPL that supports the implementation and sustained use of specific HQIM to ensure that teachers can effectively use these materials in their classrooms. It aligns closely with the curriculum's content and instructional strategies, enabling teachers to provide instruction to students and facilitate learning with integrity to what was designed while adapting to the needs of their students. This type of learning often involves curriculum implementation, as well as ongoing support and collaborative planning.

HQPL, HQIM, and CBPL are fundamentally interconnected. HQPL specifically focuses on effective PL that supports implementation and sustained use of curricula, tools, and practices that support student engagement and learning. **As we are using it, CBPL is HQPL anchored to HQIM.** HQIM form the cornerstone of CBPL, providing teachers with rigorous, standards-aligned resources tailored to meet diverse student needs and foster meaningful learning experiences. 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. CBPL is thus a vital link in this framework, directly aligning teacher development with the curriculum, empowering teachers not only to understand the content deeply but also to provide instruction to students in ways that maximize student engagement and learning outcomes. CBPL represents a specialized application of HQPL principles focused specifically on HQCM implementation, while maintaining all the core features that make PL high-quality. Ultimately, as we are using the term, ***all CBPL is by definition effective because it is HQPL, and HQPL is defined as improving instructional effectiveness and student outcomes.***

HQPL and CBPL should not be mistaken for general professional development, which is often used as a catch-all term to describe a wide range of activities that do not align with the specific characteristics of HQPL or CBPL. For instance, there is curriculum-related PL that is not high-quality. When we describe HQPL and CBPL, we are not referring to: one-time events or workshops that present information to large groups of teachers without follow-up, connections to specific instructional materials, or opportunities for practical application; mandatory human resources training covering staffing policies and regulations for school health and safety; nor technology training focused on using specific software or hardware that does not address how to effectively integrate these tools into classroom routines and instructional practices to enhance teaching effectiveness and impact.

The authors of this brief represent a group of organizations that play central—though very different—roles in this developing space:

- Learning Forward is the primary professional association for PL providers, local, state and provincial education agencies, and others who design and facilitate professional learning. They provide guidance on designing, implementing, and sustaining a range of high-quality professional learning, including curriculum-based professional learning, because they believe that when educators learn, students succeed.
- The Learning Policy Institute (LPI) conducts and disseminates independent research to inform education policy and practice, including the identification and promotion of effective PL practices that enhance teaching quality.
- The National Implementation Research Network (NIRN) focuses on advancing PL by developing and supporting the effective use of evidence-based practices through structured implementation frameworks.
- The Research Partnership for Professional Learning (RPPL) works with PL provider organizations and districts to build, share, and enact the research base around effective PL design.
- Rivet Education provides guidance and support to leaders implementing HQIM. Through its *Professional Learning Partner Guide*, Rivet evaluates and certifies PL providers based on CBPL characteristics, offering a searchable database to help leaders find vetted partners that service their specific curricula.

Each of these organizations has produced its own set of tools, guidelines, summaries, and frameworks related to HQPL and the ways CBPL can specifically improve the sustained implementation of HQIM. Here, we compare these core resources (and others, such as Carnegie Corporation's report, *The Elements: Transforming Teaching through Curriculum-Based Professional Learning*, and the Council of Chief State School Officers's (CCSSO) *HQPL Research Brief*) to explore areas of common ground and surface differences concerning CBPL.

Our central conclusion is that these frameworks are all quite aligned. While they each serve different purposes and sometimes talk about the same things in different ways, they share much in common. Here, we come together to clarify this agreement, surfacing core aspects of the frameworks, establishing a shared vocabulary, and articulating a cohesive approach that leverages the collective knowledge and experience of individual organizations.

Across the research literature and our organizational resources, we found broad agreement on 10 qualities specific to CBPL that our organizations together view as critical to creating the types of learning opportunities that teachers and students deserve. The resources and evidence base suggest that:

- CBPL is Collaborative
- CBPL is Supported by Instructional Coaches
- CBPL is Intensive and Sustained

Formats and Structures

- CBPL Supports Teachers in Meeting Individual Student Needs
- CBPL is Grounded in Practice

Characteristics and Content

- CBPL is Staged over Time
- CBPL is Focused on a Balance Between Fidelity and Adaptation

Implementation

- CBPL is Supported by Measurement for Improvement and Impact
- CBPL is Driven By Effective Leadership
- CBPL is Anchored in a Shared Instructional Vision

Supportive Conditions

Much remains to be learned about effective practice in this space. This paper does not aim to answer all of the questions held by different organizations about what works, for whom, and under what conditions. Indeed, the research on teacher PL has answers to only a few of these questions, a challenge that many of our organizations are taking up. Instead, this paper acknowledges that **we cannot meaningfully ask many of the right questions without a common set of definitions and an understanding of the current evidence** (Chu et al., 2022). Thus, in building toward a consensus vision, we balance the need for immediate guidance with the evolving nature of evidence development. When possible, we ground our analysis in research, but we also lean heavily on the collective expertise of our organizations to create a shared understanding of where the field stands and what is required, in both research and practice, to advance together.

Reading across Frameworks

To better understand the landscape, we paired a deep dive into the resources produced by our organizations with a broader scan of the field in an attempt to understand the positions that field-support organizations are staking out around the concept of CBPL. We see this as a key step-back moment to assess where the field currently stands and to identify areas for growth and development in coming years.

The Key Resource Table highlights the resources that were consulted to identify the commonalities and differences in our work. To become familiar with the resources referenced throughout this paper, please review the table and linked documents.

These resources are not directly comparable; each occupies a different space in the landscape. They include *research briefs*—such as those from LPI and RPPL—that aim to synthesize research to identify characteristics of effective PL; *position papers* that aim to shape the field—like *The Elements* and CCSSO's *HQPL Research Brief*; *implementation guides*—such as the set of documents from NIRN—that outline strategies to guide high-quality implementation; and *standards and rubrics*—such as the documents from Learning Forward and Rivet—that aim to set a quality bar for organizations involved in the work.

Yet each of these documents also embeds a series of views about how to understand HQPL's foundational elements as they relate to CBPL. All of these organizations are working from a shared vision about the broad elements that must be present across HQPL anchored to HQIM (i.e., CBPL). While the exact wording differs, nearly all of the resources we reviewed highlight these central and critical concepts. We focus on four overarching categories, identifying key areas of alignment as well as the ways that similar concepts appear differently across resources and the places where they need further clarification.

- The *formats and structures* through which CBPL is facilitated
- The *characteristics and content* of CBPL
- The *types of implementation* that are likely to lead to stronger results from CBPL
- The *additional support and conditions* needed for CBPL to be successful

In the following sections, we synthesize these resources into a simplified and aligned framework that aims to answer the key question for our field: **Across organizations, across multiple resources, across a broad evidence base, what characteristics do we know are critical for CBPL?**

Formats and Structures

CBPL is Collaborative

Teacher collaboration represents a critical component of a HQPL experience.

By "collaborative," we mean:
Intentionally structured non-evaluative processes where teachers work together to engage in shared cross-teacher learning grounded in HQIM.

Overlapping Terms and Concepts:

- Professional Learning Communities (PLCs)
- Collaborative Learning
- Communities of Practice
- Peer Observation and Feedback Conversations
- Collaborative Learning Teams

In practice, collaboration often means taking advantage of teacher time in professional learning communities (PLCs), instructional planning time, and workshops, common formats where teachers engage in CBPL. Through observation, co-learning, and reflection, **teachers can leverage their collective expertise to foster a culture of mutual support and continuous improvement**, ultimately leading to sustained improvements in teaching and student outcomes.

We see these concepts reflected differently across guidance documents. For Rivet, CBPL should be interactive and collaborative to enhance teachers' content understanding. NIRN focuses specifically on collaborative processes that improve implementation integrity. Learning Forward prioritizes a *culture of collaborative inquiry*, where PL unfolds within structured cycles that allow educators to engage deeply with instructional challenges.

Both RPPL and LPI resources call out collaborative inquiry, which RPPL describes as "peer-to-peer efforts that center directly on improving instruction," as a key theme from research on effective PL (Hill & Papay, 2022; Patrick, 2022). Research suggests that collaborative learning works in HQPL because it facilitates peer-to-peer interactions focused on improving instructional practices, fostering a supportive environment where teachers can learn from each other's experiences and expertise (Desimone, 2009; Garet et al., 2001; Ronfeldt et al., 2015; Vescio et al., 2008). Collaboration appears to have a particularly strong impact on practice when it embodies joint work around shared and specific goals; for example, working together to adapt curricular materials collectively to meet the needs of students in the school rather than simply sharing preferred instructional approaches or working haphazardly to improve instruction (Bryk et al., 1999; Charner-Laird et al., 2017; Grossman et al., 2001).

At the same time, resources and organizations broadly agree that the field still has more to learn about how best to facilitate collaborative learning experiences that shift instructional practice. Many practice guides around PLCs, for example, highlight the need for particular routines, protocols, and processes with relatively little evidence of effectiveness. Organization leaders raise questions around the sequencing of collaborative opportunities and how to balance individualized and group experiences—as well as who should be in the room at which times. The role of expertise—among peers and collaborative learning facilitators—seems critical to promoting effective peer learning. More broadly, these issues, called out in RPPL's Learning Agenda, highlight the need to explore different aspects of the social accountability created by collaborative learning structures.

CBPL is Supported by Instructional Coaches

Instructional coaching is a key tool for CBPL and an important supplement to PL opportunities that take place in group settings.

By "instructional coaching," we mean:
Personalized, job-embedded support, responsive to teachers' individual needs and instructional contexts, that provides teachers with ongoing guidance, modeling, and feedback on using HQIM and instructional approaches effectively.

The focus on coaching as a primary way to shift teacher practice reflects a growing body of research showing the significant impacts coaching can have on teachers and students (Kraft et al., 2018). Many of the largest effects recorded in recent years in PL impact evaluations have emerged from coaching programs. LPI's review of the research literature supports coaching as an important element of effective PL that can have a positive effect on teacher practices and student learning (Darling-Hammond et al., 2017).

While there is strong alignment across both research and practice that coaching is a critical strategy for CBPL, each organization operationalizes coaching in slightly different ways, with somewhat different structures. For example, Rivet sees coaching as a way to specifically help teachers engage deeply with HQIM, offering a collaborative experience to refine their content knowledge and instructional strategies. Learning Forward takes a more universal approach, framing coaching as a versatile tool that can be applied broadly to achieve learning goals for teachers to promote autonomy and continuous growth among peers. RPPL emphasizes research that highlights the importance of one-to-one coaching interactions, focusing on targeted feedback to address specific instructional challenges. NIRN views coaching as part of a larger implementation strategy, embedding it into team structures to sustain the use of evidence-based practices. This diversity in approach illustrates the field's interest in exploring coaching structures that meet varying needs.

Overlapping Terms and Concepts:

- 1:1 Coaching
- Collaborative Coaching
- Peer Coaching

The diversity of models across providers highlights our need as a field to learn more about which elements of coaching systems are most effective and how to build coaching models that integrate cycles, planning, modeling, observation, and feedback in ways that lead most consistently to improved teacher practice. At the same time, research needs to contend with the context-specific and individualized ways in which coaching might be effective. For personalized PL efforts such as coaching, the need to attend to critical issues of what works, for whom, and under what conditions is most acute. Importantly, large-scale coaching programs have tended to be less successful than those that serve only relatively small numbers of teachers in 1:1 settings (Kraft et al., 2018), making many coaching strategies feel cost-prohibitive to district leaders and pushing organizations to consider how lower-cost alternatives, such as group coaching and leader coaching, might be leveraged effectively. However, research says relatively little about how such models compare in effectiveness.

CBPL is Intensive and Sustained

CBPL should be sufficiently long-term in ways that foster deep learning and sustainable change even as specific learning goals can sometimes be accomplished through shorter, more intensive sessions.

By "intensive and sustained," we mean:
Providing recurring support that includes practice, implementation, and reflection mechanisms to guide deep instructional shifts alongside flexible, shorter opportunities tailored to immediate and more contextual needs.

Overlapping Terms and Concepts:

- Sustained and Ongoing PL
- Career-Long Learning
- Continuous Improvement Programs
- Continuous Professional Development
- Extended Learning Opportunities
- Long-Term Professional Learning
- Persistent Development

This definition reflects the fact that CBPL has multiple purposes, such as developing teachers' ongoing ability to respond to shifting classroom needs and introducing specific new concepts. Research indicates that **ongoing learning and reinforcement are necessary to sustain new instructional practices and support lasting change**, yet it also suggests that there likely are narrower instructional goals for which shorter, targeted professional opportunities may be appropriate. RPPL's research synthesis highlights this tension, calling for a flexible approach to PL models. It emphasizes that **short, concentrated interventions (e.g., summer institutes) can also be effective alongside longer-term, sustained engagement**. How time is used matters more than duration alone (Hill et al., 2022).

These multiple approaches are reflected across our scanned resources. Many of the tools, including those from Learning Forward, LPI, NIRN, and CCSSO, emphasize long-term CBPL as essential for fostering deep learning and sustainable change. Learning Forward standards advocate for PL with continuous opportunities for reflection, practice, and reinforcement, supporting the understanding that lasting change in instructional practice requires time and ongoing engagement. Similarly, NIRN's model focuses on competency strategies, including training, coaching, and integrity measurements. In CCSSO's model, teachers and leaders collaborate to embed instructional changes through continuous, data-informed planning (CCSSO, 2023). Rivet's framework emphasizes adapting CBPL duration to meet context-specific needs. While Rivet supports ongoing PL for deep content mastery, it also recognizes that certain goals can be achieved through targeted sessions tailored to specific challenges. For example, shorter interventions might address particular curriculum-related skills or classroom challenges, offering a responsive approach that accommodates diverse teacher needs across various schools and districts.

In summary, CBPL requires a balance, providing both sustained support for deep instructional shifts and flexible, shorter opportunities tailored to immediate needs. This balanced approach allows CBPL duration to be adapted based on the complexity and scope of learning objectives, the immediate context, budget, and the unique needs of teachers.

Characteristics and Content

CBPL Supports Teachers in Meeting Individual Student Needs

Organizations agree that CBPL must be designed in ways that support all teachers and all students. CBPL must adapt to and recognize teachers' strengths and learning needs while also helping teachers to adapt to and recognize students' strengths and learning needs.

By "attends to student and teacher individual needs," we mean:
PL promotes high expectations for all learners, supports teachers in differentiating instruction and effectively using HQIM to meet the needs of all students intentionally regardless of background, and creates classroom environments where all students can learn. PL is designed to be accessible to and inclusive of a broad range of teacher learning needs.

The frameworks reviewed here take up this commitment by labeling high expectations for all learners as foundational. They include drivers that support all teachers and students through different phases of their frameworks and/or use high expectations and accessibility as central theoretical underpinnings for the work they do. Across these resources, we note three dimensions that play a central role.

First, many organizations focus on **the role of teacher mindsets and the need to hold high expectations for all learners**. They describe the ways that teachers' and leaders' beliefs and attitudes toward their students can significantly influence their instructional practices and interactions with students. These resources suggest that CBPL must directly confront and engage with existing ideas about student capability, promoting in teachers a mindset that all students, particularly those from historically marginalized backgrounds and communities, can meet the high expectations embedded in HQIM.

Second, we see a strong focus on CBPL that supports **teachers' ability to provide instructional differentiation to meet the unique needs of all students**, such as multilingual learners, students requiring multi-tiered systems of support, and differently abled students. CBPL equips teachers with strategies to tailor instruction through data-informed decision-making, flexible learning activities, and inclusive practices. By focusing on these skills, CBPL fosters accessible learning environments where all students can fully engage with the curriculum and thrive.

Overlapping Terms and Concepts:

- Inclusive Practices
- Design for Belonging

Finally, several organizations highlight the need to provide **differentiated experiences for teachers** to ensure that all teachers—regardless of background or experience—can deeply engage in CBPL opportunities. This means ensuring that CBPL is designed to be inclusive and directly responsive to the needs of diverse adult learners, providing accessible, differentiated learning experiences. Some teachers may also require more, or different, PL based on their learning needs, career stage, quality of instruction, or school contexts. By ensuring differentiated access to CBPL and related HQIM resources, educational systems can support consistent and effective teaching practices across contexts, ultimately leading to improved student outcomes.

Research underscores the value of PL that equips teachers with the pedagogies and practices necessary to meet the academic and social needs of culturally diverse student populations (Gay, 2000; Hammond, 2014; Ladson-Billings, 1995; Paris, 2012). Focus on culturally responsive and differentiated instruction can empower teachers to better support learning for all students (Bottiani et al., 2018; Lara-Alecio et al., 2012). There remain open questions about how PL can best support teachers to promote supportive classroom environments, enable teachers to differentiate instruction, and help teachers meet the diverse learning needs of all students.

CBPL is Grounded in Practice

Active learning and practical application are essential components of how adults learn effectively.

By "grounded in practice," we mean:
CBPL should be built around teachers' day-to-day work, offering systems, tools, and HQIM that draw on practice, can be incorporated into classrooms, and are communicated in ways that allow teachers to learn through direct application and receive feedback to refine their practice.

Overlapping Terms and Concepts:

- Experiential Learning
- Hands-On Learning
- Inquiry-Based Learning
- Interactive Learning
- Practice-Based Learning
- Transformative Learning
- Constructivist Design

Adult learning theory suggests that **adults learn best through hands-on, practical experiences directly applicable to their work** (Trotter, 2006). Rivet's CBPL framework and Learning Forward's standards center on active learning. They call for engaging teachers in experiential activities, such as analyzing student work, participating in peer observations, and engaging in targeted coaching. *The Elements* champions transformative learning experiences where teachers engage in CBPL as a student in order to challenge teachers' deeply held beliefs. In support, NIRN's implementation drivers framework emphasizes integrity measurements and feedback loops, allowing teachers to apply and adjust new practices in real time.

The concept of learning sustainability as a dynamic, adaptable process features several frameworks and resonates with adult learning theory. These models focus on flexible learning that remains relevant and adaptable, responding to changes in educational standards, environments, and teacher needs. NIRN and Rivet both emphasize that PL efforts should embed sustainability from the beginning and should adapt to evolving needs and contexts. For example, NIRN's framework encourages support structures that evolve in response to feedback, new research, or policy shifts, viewing sustainability not as an endpoint but as an ongoing journey of improvement.

Collectively, these frameworks underscore that effective HQPL systems facilitate active, continuous, and adaptable learning grounded directly in the practical work of teaching. This focus on practice-based, interactive learning reflects adults' need for immediate relevance and application, which improves retention and mastery of new instructional strategies, ultimately enhancing teaching quality and student outcomes. Research reviews from LPI and RPPL both support this approach. LPI highlights the effectiveness of PL that "helps teachers to have a vision of practice on which to anchor their learning and growth" (Darling-Hammond et al., 2017). Similarly, RPPL notes the importance of PL that is directly "situated in practice" and includes concrete supports and materials that integrate directly into teaching practices (Hill & Papay, 2022). By ensuring that PL remains flexible and responsive, these models help teachers sustain and apply their learning even amidst changing conditions.

Implementation

CBPL is Staged over Time

CBPL must take into account the different stages of curricular implementation and the developing familiarity that teachers will have with a new curriculum.

By "staged over time," we mean:
Building and shifting across distinct implementation phases to take into account teachers' evolving needs as they use and deepen their familiarity with new materials.

Overlapping Terms and Concepts:

- Exploration
- Launch
- Unit Internalization
- Adaptation
- System Design

The NIRN Implementation Stages, drawn from implementation science research, outline four phases of curriculum implementation: Exploration, Installation, Initial Implementation, and Full Implementation. These stages often overlap. CBPL activities differ at each stage to meet implementation needs. During *Exploration*, CBPL helps align proposed changes with PL organizations' or school districts' needs and capacity, including examining the curriculum and identifying necessary supports. During *Installation*, CBPL focuses on setting expectations, preparing for initial implementation by creating initial CBPL plans, and aligning with agency and curriculum needs. During *Initial Implementation*, as the curriculum enters active use, CBPL provides job-embedded opportunities like workshops, coaching, and PLCs, while also monitoring implementation and collecting data for improvement. During *Full Implementation*, CBPL ensures curriculum integration, offers ongoing support via coaching and monitoring, and empowers teachers to lead collaborative planning and feedback cycles.

At each stage, CBPL is designed to adapt to the specific needs of district and school leaders, assisting them in designing CBPL that aligns with teachers' use of HQIM. This stage-based model offers structured guidance to support teachers as they deepen their engagement with HQIM. Furthermore, the Rivet Instructional Materials Implementation Tool, adapted from NIRN's implementation science research, outlines key actions and corresponding success criteria required for school system leaders, school leaders, and teachers to navigate each phase successfully.

Research is sparse on the types of staging and adaptation that are likely to be most effective in CBPL. The Center for Public Research and Leadership (CPRL) notes that a robust evidence base around the systems, processes, and practices necessary to support implementation of HQIM does not yet exist (Chu et al., 2022). However, interventions that rely on teacher PL, particularly to enhance the implementation of new curricula, often include post-implementation follow-up meetings as recommended in the *Full Implementation* stage. A recent review of STEM instructional improvement programs found that the presence of such meetings boosted overall program effectiveness (Lynch et al., 2019). Furthermore, the frameworks we reviewed offer substantial practical implementation knowledge about what it might look like to meaningfully shift learning content across the course of a long-term CBPL strategy. NIRN's Effective Implementation Cohort reported that a stage-based approach for implementing evidence-based practices offers the benefits of a structured process, improved outcomes, better allocation and management of resources, engagement from interest holders, flexibility, adaptability, and sustainability. Though limited, the evidence suggests that a staged approach to CBPL provides an enabling context that ensures new practices are integrated smoothly and upheld over time. As the field works toward strengthening the evidence of what works when CBPL is staged over time, there remain key areas ripe for further research to deepen our understanding of effective CBPL implementation.

CBPL Balances Fidelity and Adaptation

Teachers need to shift practice in the moment, balancing well-organized plans with unexpected classroom needs. This can make it difficult to stick to a single program or set of practices. CBPL needs to support teachers in effectively adapting to the moment while maintaining the integrity of what was designed.

Overlapping Terms and Concepts:

- Modifications
- Adaptations
- Tailoring
- Implementation with Integrity

By "fidelity and adaptation," we mean:
A balanced approach to instructional decision-making where teachers adhere to the core components and instructional strategies of their curriculum with integrity while making necessary adaptations to meet the diverse needs of their students.

A key tenet of CBPL is that it improves teachers' use of a particular set of materials by helping them to better understand what it looks like to put them into action with integrity to the intent of the curriculum designers. However, the latest wave of curricular materials are not fully prescriptive. The models we reviewed all emphasize that **effective CBPL implementation requires not only a phased approach but a flexible one with built-in adaptability that maintains integrity to curriculum.**

However, different models talk about the balance between fidelity and adaptation differently. Learning Forward suggests implementing curriculum "with integrity" rather than strict fidelity, allowing teachers to make thoughtful adaptations that align with core instructional goals. Similarly, NIRN advocates "fidelity to key principles," focusing on adherence to fundamental goals while permitting flexibility in instructional methods, fostering an outcome-centered approach rather than strict procedural adherence. RPPL emphasizes the concept of "responsive fidelity," establishing structured "guardrails" that guide teachers in making context-sensitive adjustments to align with curriculum intent while addressing specific student needs.

Rivet, *The Elements*, and CCSSO offer additional perspectives on flexibility within integrity. Rivet's CBPL framework emphasizes context-sensitive adaptation, supporting both long-term integrity and shorter, targeted adjustments based on immediate classroom needs. *The Elements* takes a collaborative approach, viewing integrity as a shared responsibility between teachers and administrators, where adaptation

decisions are made jointly, promoting alignment with instructional goals through continuous feedback. This shared decision-making structure supports teacher agency while ensuring adaptations are intentional and responsive. CCSSO emphasizes a system-wide approach, prioritizing integrity to the curriculum's fundamental principles and core objectives while encouraging adaptations to better meet students' specific needs.

All organizations and resources agree, though, that adaptation does not mean "watering down" expectations for the grade-level academic content that students can learn. While they support teachers adapting curricular materials to context, they do not argue for limiting instruction based on the students in the classroom.

Some research supports a blended, slow-release approach from integrity to adaptation. Two recent studies examined teachers' experiences with intensive CBPL across two years of curriculum implementation. In the first year, teachers were instructed to implement the curriculum as designed. In the second year, select teachers were encouraged to make adaptations within structured "guardrails" co-developed with PL providers. Teachers who adapted the curriculum within these parameters achieved stronger student outcomes than those who adhered strictly to the original design (Kim et al., 2017; McMaster et al., 2014).

Ultimately, while all the resources we reviewed support integrity with some level of adaptation, they differ in the degree and nature of flexibility preferred, as well as in who drives adaptation decisions. Most of the resources don't fully articulate what adaptation with integrity truly means or looks like in practice, or how or what data (e.g., student work, formative assessments) should decide which adaptations to pursue. This distinction underscores an opportunity for clearer guidance on how to use school, teacher and student data to select effective adaptations that maintain curriculum integrity while addressing specific classroom needs. We also need a deeper understanding of the ways that teacher capacity, mindsets, and context affect the impacts of adaptation.

Supporting Conditions

CBPL is Supported by Measurement for Improvement and Impact

Data collection and analysis are essential to effective CBPL, driving program improvement and ensuring accountability.

Overlapping Terms and Concepts:

- Data-Informed Decision Making
- Data Literacy
- Evidence-Based Decision Making
- Evidence-Guided Practice

By "measurement for improvement and impact," we mean:
CBPL programs should focus on using specific data (e.g., impacts on teacher learning, coaching success, student experience and academic outcomes) grounded in rigorous criteria and evidence-based measures to inform improvement and impact. These data should assess both immediate and long-term outcomes tied to professional growth, curriculum implementation, and teacher and student learning.

The concept of measurement to support improvement and impact in teacher practices is foundational across PL resources, though it manifests in varied ways. Reading across resources, we note three primary uses of measurement that play a central role in CBPL.

First, several resources emphasize the importance of **evaluating PL program implementation and impact** using rigorous criteria and evidence-based measures. For example, NIRN's implementation drivers use fidelity measurements to ensure that programs are implemented as intended, while Rivet's framework supports teachers in collecting, analyzing, and using data from various sources, including HQIM-embedded student work and assessments, to determine how to meet students' learning needs or support teachers with their implementation of the HQIM. Learning Forward's standards call for collecting data on student learning outcomes and teacher practices to measure effectiveness. RPPL adds an emphasis on research designs that align with the inferences programs want to draw (e.g., causal designs to describe program impact) and the importance of context-sensitive data that reflects diverse school settings and instructional environments. In these approaches, data serves as a clear impact measure, allowing assessment of both immediate improvements in teacher practices and longer-term outcomes such as student achievement growth and sustained professional improvement among teachers. By collecting and analyzing multiple data points across these areas, frameworks create a systematic way to monitor, adjust, and ensure the effectiveness of PL on both teaching quality and student success.

Second, some resources integrate measurement within a broader improvement science framework, highlighting the **importance of continuous learning**. Here, data collection supports iterative improvement, fostering evidence gathering that refines CBPL practices and ensures that they remain responsive to teachers' needs. For instance, Learning Forward recommends using regular data such as teacher reflections, classroom observations, and student engagement surveys within PLCs, where teachers collaboratively review data to make real-time adjustments. In the same way,

The Elements, CCSSO, and Rivet's CBPL framework emphasize building reflection and feedback time into PL when teachers can examine data and make changes to instructional practice in real time. NIRN also applies this continuous improvement approach by embedding rapid and small plan-do-study-act cycles and coaching feedback as checkpoints that guide adaptive, immediate support for teachers, while RPPL incorporates teacher-driven learning goals to personalize and engage teachers more directly in the measurement process. In all of these cases, continuous data collection supports an iterative, adaptive process that keeps PL relevant to teachers' evolving needs and priorities.

Finally, these concepts also derive from a similar set of views shared by our organizations that CBPL requires **building teachers' data literacy to support the ongoing use of evidence** at all stages of HQIM implementation as well as across the student learning process. This includes ensuring that teachers, coaches, and leaders can collect, interpret, and act on diverse data sources, from system-wide indicators to formative assessments and other real-time measures of student learning that ensure teachers can adjust instruction in meaningful ways. Different organizations have different views about the level of systematization necessary to make this possible and whether to focus PL efforts at the teacher or the system level. For example, Learning Forward emphasizes data literacy by equipping teachers to interpret student data and collaboratively design improvements within PLCs.

Likewise, Rivet encourages regular analysis of student work and curriculum alignment to guide instructional decisions. In contrast, NIRN and CCSSO focus more on the supporting systems that provide implementation data to both teachers and leaders. CCSSO advocates for HQPL that develops data literacy that emphasizes evidence-informed decision-making for system leaders. NIRN uses fidelity assessments and coaching feedback to enable teachers to track and adjust their practices in real time, ensuring alignment with program goals. It also calls for larger-scale structures that can make available timely, reliable, and valid data from formative assessments and other measures "from the classroom, grade, school, and district levels so progress can be celebrated, needs identified, and improvement plans generated" (National Implementation Research Network [NIRN], 2015, p. 12).

There is less consensus within the research world on how and when to use PL to build data literacy. At a broader scale, studies of large-scale programs to encourage teacher data use have shown little effect (Hill, 2020). However, evidence is stronger that focused teacher use of student work and formative assessments can lead to stronger student outcomes (Ward et al., 2015). Within this body of research, studies suggest that teachers should actively analyze data on students' success with particular curricula and integrate such data into decision-making processes that guide HQPL strategies (Blase et al., 2015).

CBPL Is Driven By Effective Leadership

Leaders play a crucial role in establishing a shared vision, promoting a culture of collaboration, and ensuring that CBPL is sustained and embedded in the school's practice.

By "effective leadership," we mean:
The active engagement of leaders at both school and district levels in setting a clear PL strategy, creating a coherent approach aligned with school goals and practices, and providing ongoing support to teachers throughout the implementation process.

Each document acknowledges that **high-quality leadership is pivotal to building the conditions for effective CBPL implementation**. NIRN, for example, highlights the need for school and district leaders to participate in implementation teams and the supporting role of regional and state decision-makers. CCSSO, Rivet, and Learning Forward note that effective HQPL requires strong instructional leadership, with system and school leaders who set standards-aligned visions, foster a culture of continuous improvement, protect teacher PL time, and recognize the distributed nature of leadership in schools so that teachers are given opportunities and recognition for helping their peers learn. *The Elements* proposes that leaders model, guide inquiry, create learning systems that create a culture of respect, and support risk-taking necessary for curriculum implementation. LPI's case studies illustrate the ways that implementation efforts can require leadership shifts to build coherence and buy-in. Aligning time, funding, and PL efforts with a shared vision for effective instruction allows for a coherent PL strategy (Darling-Hammond et al., 2017).

The resources diverge somewhat in the degree to which they focus on PL efforts for leaders. Both NIRN and Learning Forward emphasize the crucial role of leaders in vision-setting while also recognizing the importance of ongoing implementation support. Rivet's rubric builds on this by specifically highlighting the need for leaders to reexamine their mindsets and develop their instructional leadership abilities, enabling them to fully engage in cycles of coaching, observations, and feedback. Some PL providers tend to focus HQPL efforts primarily on teachers, while others have actively pivoted to a greater focus on instructional leadership as a driver of curriculum success (Freitag, 2023).

Overlapping Terms and Concepts:

- Leadership
- System Transformation
- Adaptive Leadership
- Support for Leaders
- System Leaders
- School Leaders
- Change Management

Research literature broadly agrees that building- and system-level leadership plays a key role in the success of any implementation effort given their ability to set priorities, create coherence, and build buy-in across personnel (Grissom et al., 2021). Research highlights the essential role of principals in sustaining educational change while identifying key challenges, such as limited time and funding, which may hinder PL quality and outcomes (Darling-Hammond et al., 2017; Desimone et al., 2002; Hill et al., 2022; Leithwood et al., 2004).

At the same time, we know far less about how to engage leaders in the detailed work of instructional change. RPPL's learning agenda notes that descriptive studies make clear that leadership support can be "a major—and sometimes overriding—factor in teacher take-up and implementation of program goals." But whether and how leaders should be involved in active learning around CBPL remains an open question.

CBPL is Anchored in Shared Instructional Vision

CBPL should include a shared vision of high-quality instruction throughout the system, reflecting coherence across school policies, practices, and curricula.

By "anchored in a shared instructional vision," we mean:
Alignment of PL with school and district curriculum, goals, policies, and practices to create a cohesive approach to high-quality instruction and outcomes for all students.

Overlapping Terms and Concepts:

- Coherence
- Coherent Professional Learning
- Goal-Driven Alignment
- Standards-Based Alignment
- Strategic Alignment
- Values Aligned

All resources highlight the importance of **a shared and coherent instructional vision**. Such alignment can foster continuity and purpose across the educational ecosystem, supporting sustained improvement in instructional quality and ensuring that system-level goals and classroom practices are mutually reinforcing.

For example, Rivet's rubric provides indicators for building a shared vision and advocating for CBPL materials that, when combined with system policies and processes, facilitate consistent support for HQIM implementation across roles, subject areas, grade levels, and teacher experience. *The Elements* further underscores a shared vision as essential, arguing that meaningful reforms only succeed at scale when a common vision of teaching and learning reaches every classroom. In this regard, a shared vision requires clear expectations for system leaders, policies to support teachers, and principles that ensure district initiatives translate to actionable classroom practices. Effective implementation of high-quality, content-based PL depends on this system-level alignment.

This shared instructional vision must extend across educators' careers, from teacher preparation to ongoing on-the-job learning. LPI notes that a lack of integrated coherence in instruction and limited system capacity often results in ineffective PL (Darling-Hammond et al., 2017). To counter this, LPI and CCSSO recommend a vertically aligned vision for high-quality instruction and HQIM, enabled by HQPL, strong instructional leadership, and supportive school structures. Rivet's rubric further details the need for coherence at each level—district staff, school leaders, coaches, and teachers—demonstrating that actions within and across all levels are required to foster coherence and support high-quality instruction. Future research should examine in more detail how districts can successfully move to align policies and practices in coherent ways while also balancing needs for context-specific decision-making by individual schools and teachers. We also need to know more about how systems-level efforts to promote instructional consistency and coherence influence teachers' job satisfaction, instructional practices, and collective efficacy, as well as broader outcomes for students.

Conclusion and Recommendations

The current surge of excitement around HQIM and accompanying CBPL is likely to fade if the field can't coalesce around what it looks like to do this work well, in ways that best serve the varying needs of the teachers and students who engage with these materials on a day-to-day basis.

Yet the range of guidance about what "high-quality" means when it comes to teacher-focused CBPL continues to grow as the field develops. In this paper, our organizations attempt to align around a series of evidence-based characteristics that together describe how CBPL looks and feels, with particular attention to the coupling of HQIM with HQPL as critical to advancing quality classroom teaching and student outcomes. We also acknowledge that the characteristics of HQPL articulated here are equally important in supporting the PL of educators more broadly, and can be used to guide other forms of educator PL (e.g., school leaders, support staff, paraeducators, etc.).

Across the selected studies and frameworks produced by organizations leading the PL field, we found broad agreement on 10 qualities of CBPL, qualities that our organizations together view as critical to creating the types of learning opportunities that teachers and students deserve. HQPL necessitates a cohesive focus on all of the evidence-based characteristics.
The resources and evidence base suggest that:

- CBPL is Collaborative
- CBPL is Supported by Instructional Coaches
- CBPL is Intensive and Sustained

Formats and Structures

- CBPL Supports Teachers in Meeting Individual Student Needs
- CBPL is Grounded in Practice

Characteristics and Content

- CBPL is Staged over Time
- CBPL is Focused on a Balance Between Fidelity and Adaptation

Implementation

- CBPL is Supported by Measurement for Improvement and Impact
- CBPL is Driven By Effective Leadership
- CBPL is Anchored in a Shared Instructional Vision

Supportive Conditions

For each of these, we provide shared examples of what these qualities look like in practice. However, we recognize that many districts and teachers are doing their best despite persistent challenges within the education ecosystem. These challenges include high teacher turnover and limited financial, human, and time resources at all levels, among many others. For example, intensive, sustained CBPL is particularly hard in districts with high teacher turnover as it becomes hard to tie HQPL to specific curriculum phases when many new hires are encountering the materials for the first time. CBPL in such places requires a more adaptive approach with ongoing onboarding and support. Yet, we remain committed to continuous improvement and providing the best CBPL opportunities for all teachers and students. We also highlight areas of modest divergence in definition or focus in the hopes of sharpening how practitioners use these terms.

Looking across these characteristics, what can we gain as a developing field?

For PL designers—the organizations and district leaders who are building and delivering PL content—we see this as a set of key criteria that can guide CBPL and HQPL design choices and should be set alongside current PL offerings and HQIM when appropriate to ensure that these offerings are grounded in evidence and anchored around a foundational definition of quality.

For policymakers—those at the state and district level setting standards for this work—we offer these criteria as an initial set of guidelines that can be used strategically to build coherence and drive the PL ecosystem toward a shared use of terms and practices.

Finally, ***for participants experiencing CBPL***—teachers and leaders working in schools and districts—we see these as a series of look-fors that can be used both to select PL opportunities and to ensure that learning opportunities offered are most likely to lead toward stronger, sustained use of curricular materials and better teaching and learning across individuals and schools.

Across all of these groups, we encourage the use of a shared set of terms and definitions that provide all of us with a common language to deepen our work and communicate as a unified field. This kind of level-setting is an important step toward stronger shared learning.

Lastly, the definitions we list above provide an important foundation, but they also highlight many of the areas where we still have a lot to collectively learn about effective practice. As research continues to build our knowledge of what works in CBPL, we expect to refine our criteria while hopefully continuing to retain the benefits of a common language. With a more aligned voice and vision guided by the existing frameworks and resources we've reviewed, we seek to generate stronger coherence across all PL systems at every level to ensure that they are better designed to meet the needs of all teachers and all students.

Appendix

Key Resource Table

The following key resources were reviewed to inform the content of this position paper. Each source has a distinct purpose and audience, yet contains similar content.

RESOURCE	PURPOSE	OVERVIEW OF CBPL FRAMEWORKS AND RESOURCES
Standards for Professional Learning **by Learning Forward**	The standards offer educators the latest knowledge and insights to design, implement, and sustain HQPL.	Learning Forward presents its *Standards for Professional Learning* to describe the conditions, content, and processes for PL that lead to high-quality leading, teaching, and learning for students and educators. The 11 standards work within a framework to outline a system for professional learning. To create HQPL that results in improved educator practices and improved student results, educators apply the 11 standards in concert. The three categories within the framework follow: • Standards within the Rigorous Content for Each Learner frame describe the essential content of adult learning that leads to improved student outcomes. • Standards within the Transformational Processes frame describe process elements of PL, explaining how educators learn in ways that sustain significant changes in their knowledge, skills, practices, and mindsets. • Standards within the Conditions for Success frame describe aspects of the PL context, structures, and cultures that undergird HQPL.
Active Implementation Overview (Module 1) **by the National Implementation Research Network (NIRN)**	This overview is designed to help practitioners (in sites, communities, and state organizations) build "Active Implementation" capacity to ensure continually improving academic and behavioral outcomes.	The Active Implementation Frameworks (AIF) are a set of evidence-based practices designed to help organizations successfully implement and sustain effective programs and curricula. These frameworks emphasize the importance of a structured, systematic approach to implementation, focusing on the critical components that influence success, such as HQPL/CBPL, leadership, capacity building, and fidelity to core practices. AIF guides organizations in ensuring that programs are implemented as intended, with ongoing support, monitoring, and continuous improvement. The Active Implementation Frameworks include: • Usable Innovation: This framework focuses on defining and developing clear, practical practices or programs (i.e. curricula) that can be implemented effectively across various settings. • Implementation Drivers: This framework identifies the critical components—such as competencies, systems, and leadership—that influence the successful implementation and sustainment of new practices. • Implementation Stages: This framework outlines the phases—exploration, installation, initial implementation, and full implementation—necessary for successfully adopting and scaling evidence-based practices. • Implementation Teams: This framework emphasizes the need for cross-functional teams at different levels of the organization to support, manage, and ensure the success of the implementation process. • Improvement Cycles: This framework stresses the importance of continuous feedback and iterative improvements to refine and sustain the implementation process over time.

RESOURCE	PURPOSE	OVERVIEW OF CBPL FRAMEWORKS AND RESOURCES

Building Better PL: How to Strengthen Teacher Learning **by Research Partnership for Professional Learning (RPPL)**	This research brief describes effective PL design features, reviews the existing evidence base supporting its use, and poses questions to guide future research into each area.	This interpretation of the recent literature suggests that several design features characterize PL that more effectively improve instructional practice and student outcomes across classrooms and contexts. Some focus on how PL is delivered (formats) and others on what gets covered (foci).
		• PL Features and Formats (*How*):
		  ◦ Built-in time for teacher-to-teacher collaboration around instructional improvement,
		  ◦ One-to-one coaching, where coaches work to observe and offer feedback on teachers' practice, and
		  ◦ Follow-up meetings to address teachers' questions and fine-tune implementation.
		• Content of PL (*What*): For the *what*, there is growing evidence that PL may be more productive when it focuses on:
		  ◦ Building subject-specific instructional practices rather than building content knowledge alone,
		  ◦ Supporting teachers' instruction with concrete instructional materials like curricula or formative assessment items rather than focusing only on general principles, and
		  ◦ Explicitly attending to teachers' relationships with students.

Dispelling the Myths: What the Research Says About Teacher Professional Learning **by Research Partnership for Professional Learning (RPPL)**	This research brief aims to distinguish fact from fiction about PL, and to help PL providers ensure that all teachers and students receive the learning opportunities they deserve.	This research brief argues that commonly held beliefs about teacher PL are not supported by research.
		This brief dispels those myths and delivers some truths about effective teacher development.
		• Myth 1: PL is a waste of time and money.
		  ◦ Truth: Evidence shows that PL can lead to shifts in teachers' skills and instructional practice and significantly improve student learning.
		• Myth 2: PL is more effective for early career teachers and less effective for veteran teachers.
		  ◦ Truth: PL opportunities have been shown to support teacher development at all levels of experience.
		• Myth 3: PL programs must be job-embedded and time-intensive to be effective.
		  ◦ Truth: Programs of varying lengths and formats can produce wide-ranging effects depending on how time gets used.
		• Myth 4: Improving teachers' content knowledge is key to improving their instructional practice.
		  ◦ Truth: PL programs that aim directly at instructional practices are more likely to shift student learning than PL programs with a focus on content knowledge.
		• Myth 5: Research-based PL programs are unlikely to work at scale or in new contexts.
		  ◦ Truth: Programs can have positive effects across a wide range of schools, but strong implementation can help sustain effects at scale.
		• Myth 6: Districts should implement research-based PL programs with no modifications.
		  ◦ Truth: Practice fidelity first and adaptation with guardrails second.

Effective Teacher Professional Development **by Learning Policy Institute**	The primary goal of this report is to illuminate the effective features of PL to inform policymakers and practitioners responsible for designing, planning, and implementing potentially productive opportunities for teacher learning.	To define features research has found to positively effective PL that results in changes in teacher practices and improvements in student learning outcomes, the authors reviewed 35 studies that emerged from an extensive search of the literature over the last three decades which met these methodological criteria: they featured a careful experimental or comparison group design, or they analyzed student outcomes with statistical controls for context variables and student characteristics. The report found seven widely shared features of effective professional development. Such professional development: • Is content focused: PD that focuses on teaching strategies associated with discipline-specific curriculum content supports teacher learning within teachers' classroom contexts. • Incorporates active learning: Active learning engages teachers directly in designing and trying out teaching strategies, providing them an opportunity to engage in the same style of learning they are designing for their students. • Supports collaboration: High-quality PD creates space for teachers to share ideas and collaborate in their learning, often in job-embedded contexts. • Uses models of effective practice: Curricular models and modeling of instruction provide teachers with a clear vision of what best practices look like. • Provides coaching and expert support: Coaching and expert support involve the sharing of expertise about content and evidence-based practices, focused directly on teachers' individual needs. • Offers feedback and reflection: HQPL frequently provides built-in time for teachers to think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback. • Is of sustained duration: Effective PD provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice.

RESOURCE	PURPOSE	OVERVIEW OF CBPL FRAMEWORKS AND RESOURCES
The Elements: Transforming Teaching through Curriculum-Based Professional Learning **by Carnegie Corporation of New York**	This challenge paper explores how PL anchored in HQIM can allow teachers to experience instruction as their students will, change instructional practices, and lead to better student outcomes.	*The Elements* are the expectations and actions that school and district leaders, curriculum developers, and teacher development organizations take to promote and design CBPL. They include: • Core Design Features, which identify the purpose of CBPL, include "Curriculum and Transformative Learning." • Functional Design Features, which include four Elements that inform how CBPL works when designed and implemented. "Learning Designs, Beliefs, Reflection & Feedback, and Change Management." • Structural Design Features, include three Elements that describe the parameters and settings for CBPL. "Collective Participation, Models, and Time" • The Essentials are the necessary conditions at the system level for CBPL. "Leadership, Resources, and Coherence." *The Elements* may be used in different combinations depending on what individuals and organizations need at different times.

Framework for High-Quality, Curriculum-Based Professional Learning **by Rivet Education**	This framework defines for educators the characteristics, types, and structures that construct high-quality, curriculum-aligned PL.	The goal of this framework is to organize and guide Rivet's work and help the field understand the essential components and characteristics of strong curriculum-aligned PL.
		They include:
		• Structures (Formats): High-quality CBPL may be delivered in various structures, depending on content, audience, or type of session. Rivet has defined four types of PL structures that enable the delivery of CBPL. All PL structures, regardless of whether or not they are delivered by an internal team member or external PL provider, are led by experienced educators with deep knowledge of the content area and HQIM.
		  ◦ Coaching, Workshops, Consultation, Collaboration/PLCs, Learning Communities
		• Types (Phases/Substance/Purpose): CBPL is an integral component of the HQIM implementation journey. Each type of CBPL aligns with key moments in the HQIM implementation timeline. High-quality CBPL serves four distinct purposes, each tailored to specific audiences and objectives.
		  ◦ Adoption, Initial implementation, Ongoing implementation for teachers, Ongoing implementation for leaders
		• Characteristics: Seven characteristics must be met across all types and formats of CBPL for it to be considered high-quality. High-quality, curriculum-aligned professional learning must be:
		  ◦ Equity-focused, Specific to educators' context, Content-focused and HQIM-aligned, Interactive & collaborative, Responsive to beliefs & mindsets, Vision-aligned, Data-driven

The Importance of Instructionally Focused Professional Learning **by the Council of Chief State School Officers (CCSSO)**	This paper provides a research-based summary of what we know about HQPL. It is designed to help state education agency leaders in districts move towards wider use of HQIM and more effective professional development linked to these materials, so teachers can make the best use of them.	This paper describes four types of academically focused PL, the structures for delivering PL, the key attributes of successful PL, and the conditions that systems need to ensure are in place. They include: • Four types of instructionally focused PL that support the use of HQIM: Adopting a curriculum; launching a curriculum; providing ongoing support; and system design and leadership support. • Four structures to support instructionally focused PL: Collaboration among teams of teachers grouped by content area and grade levels; coaching with observation and feedback; training workshops for teachers and or leaders; and consultations with system and school leaders. • Key Attributes of HQPL: HQIM at the center; grounded in evidence of student learning; develops teachers' content knowledge and pedagogical content knowledge; develops data literacy and emphasizes evidence-informed decision-making; supports teachers to effectively engage students in challenging tasks; attends to teacher motivation and mindsets; differentiates support for new and developing teachers. • Conditions and Structures Support HQPL: Strong instructional leadership at the school and district level; HQIM; and school-system structures that support the ongoing learning of teachers and school leaders. • Monitoring Progress: Tracking access to HQIM and CBPL; monitoring the quality of the PL; focusing on the quality of instruction; tying this to growth in student outcomes.

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