



SUSAN BUSH-MECENAS, SY DOAN, IVY TODD, MELISSA KAY DILIBERTI, LAUREN COVELLI,  
SABRINA LEE, ZHAN OKUDA-LIM

# Building State Capacity and Strategies to Promote High-Quality Instructional Materials

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Implementation and Outcomes of the High-Quality  
Instructional Materials and Professional Development  
Network

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# About This Report

The High-Quality Instructional Materials and Professional Development (IMPD) Network is a consortium of state education agencies organized by the Council of Chief State School Officers, which is working to increase access to high-quality instructional materials (HQIM) and high-quality professional learning (HQPL) opportunities for teachers in their states. The IMPD Network provides member states with several resources, including a dedicated coach, structured in-person convenings guided by IMPD leadership, and opportunities for peer learning. Founded in 2017, the IMPD Network comprises 14 member states as of the 2023–2024 school year.

In this report, we draw on interviews, observations, document reviews, and survey data to provide a thorough documentation of *how* the IMPD Network supports the work of policymakers in their member states and whether these efforts have translated to the development of policy, policymaking capacity, and changes in teacher usage of HQIM and participation in HQPL. We close with a discussion of key findings and implications for state educational agencies and other policymakers interested in the role of networks for advancing state education policy.

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team. Second, we are grateful to the U.S. public school teachers who agreed to participate in the American Educator Panels and completed the American Instructional Resources Survey between 2019 and 2024. Their responses are invaluable to this report and the broader research base on teachers' use of instructional materials. Third, we want to thank Anton Wu, AK Keskin, Ashley Woo, Jeimee Estrada-Miller, Mekdes Shiferaw, Elaine Leigh, and Sarah Zelazny for the data collection and analysis they provided to this report. Jill Cannon served as the quality assurance manager for this report and Elaine Wang and Morgan Polikoff served as peer reviewers, providing valuable feedback that strengthened this research. Additionally, this project benefited from the guidance and leadership of Julia Kaufman and Andrea Prado Tuma. We are also grateful to Monette Velasco and Kennethea Wilson, who provided expert editing and formatting for this report. Last, we are incredibly thankful to the many state and district educational leaders who agreed to participate in this research through interviews or by allowing our research team members to observe their IMPD Network coaching sessions.

# Summary

Instructional materials, such as printed textbooks and digital resources, are a cornerstone of K–12 education and represent a powerful lever for improving classroom instruction. Historically, the selection of instructional materials in the United States has been predominantly led by local school districts, allowing material selection to be tailored to the specific needs of students and educators. Although this decentralized approach is intended to ensure local alignment, critics argue that it creates inefficiencies, neglects best practices, and contributes to disparities in instructional quality across districts. Over the past two decades, state education agencies (SEAs) have increasingly expanded their role in this process, encouraging the adoption of state-approved instructional materials and aligned professional learning (PL) opportunities to improve instructional quality and better align materials with state standards.

One such effort is the High-Quality Instructional Materials and Professional Development (IMPD) Network—a multistate coalition founded in 2017 to advance high-quality instructional materials (HQIM) and high-quality PL (HQPL) initiatives—that is supported by the Council of Chief State School Officers (CCSSO). As of the 2023–2024 school year, the network consisted of 14 state members that operate within the IMPD Roadmap—a shared framework outlining the following five key policy areas to advance HQIM and HQPL work:

- **Policy Area 1.** Communicate with, learn from, and gain support from allies for HQIM work.
- **Policy Area 2.** Increase local education agencies' selection and use of HQIM by signaling the quality of instructional materials and incentivizing their selection and use.
- **Policy Area 3.** Increase the number of teachers participating in HQPL that is grounded in the skillful use of HQIM.
- **Policy Area 4.** Increase the number of educator preparation programs (EPPs) that prepare new educators to identify and skillfully use HQIM.
- **Policy Area 5.** Collect and analyze data to support continuous improvement and understand outcomes.

The Walton Family Foundation contacted RAND researchers to evaluate the implementation and impact of the IMPD Network's HQIM policy work and state support initiatives. In particular, our study addressed four key research questions focusing on the network's support for SEAs, capacity-building efforts, policy strategies, and outcomes for districts and teachers. The findings from the study, which are presented in this report, can support SEAs advancing state curriculum policy; intermediary organizations (e.g., CCSSO and the IMPD Network) that seek to advance state policy through multistate networks; and funders supporting these policy efforts.

## Approach

We employed a mixed-methods study design to evaluate how the IMPD Network supports policymakers in their member states and whether these efforts have translated into policy development, increased policymaking capacity, and changes in teacher engagement with HQIM and HQPL participation. The evaluation draws on data collected from

- 161 interviews with IMPD hub staff and coaches, SEA leaders, and district leaders
- 25 observations of IMPD coaching sessions
- IMPD coach reports on state progress
- reviews of HQIM policies across 50 states and the District of Columbia
- data from the 2019–2024 American Instructional Resources Survey.

## Key Findings

- **Member states found IPMD Network coaching valuable.** Coaching support—offered by experienced professionals with policy expertise and local knowledge—was a valuable resource for member states; this support provided tailored guidance, project management assistance, and insights on potential policy strategies. Member states also benefited from regular in-person convenings, which facilitated peer knowledge-sharing across states.
- **IMPD Network strengthened SEAs’ policymaking capacity.** Member states’ participation improved SEAs’ policymaking capacity, particularly in (1) improving the alignment of SEA structures, routines, and activities; (2) expanding access to knowledge and expertise; and (3) developing individual knowledge and skills.
- **IMPD member states led in policy development related to IMPD Roadmap goals.** IMPD member states had more policies than non-IMPD states to support districts in identifying, adopting, and funding HQIM and HQPL. These states reported progress on all five policy areas; significant progress signaled the quality of HQIM and HQPL to districts and schools and distinguished their approach from non-IMPD states.
- **Districts considered SEA guidance in their often-complex HQIM selection processes.** District leaders attended to the local context and fit in their instructional materials selection processes. SEA guidance was one of several factors shaping districts’ decisions concerning selection processes.
- **HQIM usage increased nationwide.** Between 2019 and 2024, HQIM usage in English language arts (ELA) and mathematics increased across both IMPD states and non-IMPD states.
- **Teachers in IMPD states are more likely to use ELA HQIM and participate in ELA HQPL.** Teachers in member states were more likely to use high-quality ELA materials than teachers in non-IMPD states. Differences in math HQIM use varied by state and analytical method.

## Recommendations

Using our findings, we identified considerations and recommendations for intermediaries and networks supporting SEAs in their policy work, SEAs engaging in HQIM and HQPL work, and funders of these efforts.

### Recommendations for Intermediaries and Multistate Networks

- **Set clear goals and track progress:** Specify goals and maintain focus on these goals while allowing flexibility in how states pursue them. Regularly measure and transparently communicate member progress on these goals to provide accountability, inform adjustments, and motivate ongoing progress.
- **Use structure to focus time and attention on consistent, specific policy goals:** Structure the work to encourage SEAs to dedicate time, space, and attention to specific HQIM and HQPL policy goals. Support the deepening of policy work at the local level over time.
- **Provide coaching expertise:** Offer members access to experienced coaches who have policy and strategy expertise, project management skills and tools, and a strong understanding of local contexts to effectively guide policy work.
- **Facilitate peer collaboration:** Create opportunities for peer or role-alike collaboration on shared policy goals with appropriate supports for shared learning and interaction.
- **Document and share strategies:** Document effective state strategies and provide guidance on adapting them to local contexts. Share best practices across member states to foster innovation and alignment.
- **Build SEAs organizational capacity:** Assist SEAs in assessing their existing organizational capacity and aligning their structures and procedures across departments and silos. Support the development of communications and data skills critical for advancing policy strategies.
- **Plan for sustainability:** Support SEAs in prioritizing long-term sustainability of HQIM and HQPL policy work through tools and monitoring protocols that require participants to plan for funding, staffing, and organizational alignment.
- **Focus on behavioral change:** Assist SEAs in identifying how their strategies will drive behavioral changes of administrators and educators across the schooling system while setting appropriate measures and targets for these changes to use this information to guide ongoing work.

### Recommendations for SEAs

- **Define and prioritize goals:** Identify clear goals for HQIM and HQPL policy work. Create opportunities for team members to dedicate time regularly to maintaining a consistent focus on these priorities.
- **Identify peer networks and leverage expertise:** Identify and connect peers in similar roles across SEAs to share learning experiences and strategies on policy goals. Leverage experienced

coaches and consultants with policy and project management expertise to assist leaders and their teams in managing complex policy development and implementation work.

- **Adapt policy strategies:** Survey national and state policy approaches to identify promising policy strategies and adapt them to local contexts.
- **Address implementation challenges:** Analyze the SEAs' organizational capacity gaps and pursue alignment and support to overcome typical policy challenges.
- **Ensure long-term sustainability:** Plan for the sustainability of funding and staffing to support HQIM and HQPL initiatives when developing and implementing new procedures and processes to ensure that activities can be supported in the long term.
- **Balance support models:** Balance direct SEA support to districts, schools, and educators by leveraging external providers to facilitate scalability and sustainability.
- **Integrate with school district policies:** Assess existing district policies and activities before implementation. Provide clear guidance on how new state policies or activities will supplement, supplant, or integrate with existing district practices.
- **Track behavioral changes:** Identify the behavioral changes envisioned for district administrators, school leaders, educators, and other support staff. Set measurable targets and monitor implementation progress to support these shifts.
- **Leverage national movements:** Capitalize on broader national policy movements to build urgency and allyship around advancing HQIM and HQPL work.

## Recommendations for Funders

- **Focus on clear, consistent, and specific goals:** Encourage grantees to clearly specify their goals and maintain a consistent focus on HQIM and HQPL priorities while offering consistent support and accountability structures.
- **Support behavioral change tracking:** Encourage intermediaries and SEAs to identify target behavioral changes of administrators and educators across the schooling system, as well as associated measures and benchmarks, including how implementation proceeds, emergent challenges, and impact.
- **Plan for long-term investments:** Acknowledge the lengthy time frame needed for state policy changes to translate into classroom-level improvements to instruction and student experience. Plan investments to appropriately support ongoing and deepening work.

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# Introduction

Instructional materials, whether printed textbooks or digital resources, occupy a central role in schooling systems. Ideally implemented, a teacher's instructional materials provide a comprehensive program of instruction for a given grade and subject, acting as a vehicle through which academic standards can affect classroom practice (Steiner, 2025). Conversely, instructional materials that are poorly selected or poorly implemented risk guiding teachers toward delivering instruction that is not rigorous, engaging, or aligned with state academic standards.

Typically, the selection of instructional materials for K–12 U.S. classrooms is locally led. School districts often command ultimate authority over what materials, and supports for those materials, are adopted in their schools (Doan and Kaufman, 2024). District-led procedures are often thought to help ensure that the materials selected for use are well aligned with the needs of the students and educators in that locality. However, critics of these processes claim that this decentralized system creates unnecessary redundancies, fails to incorporate best practices, and ultimately contributes to divergences in the quality of instruction students receive across different districts (Jacobsen and Saultz, 2012; Polikoff, 2021; Tulley, 1985).

Over the past two decades, state educational agencies (SEAs) have significantly expanded their influence on instructional infrastructure (Hanna, 2014; Mintrop and Trujillo, 2005; Smarick and Squire, 2014). This expansion extends to instructional materials: Several state departments of education have encouraged districts to adopt state-approved materials and have sponsored aligned professional learning (PL) opportunities. States expanded their roles so that teachers use materials most aligned with their state standards and in response to evidence that student test scores have improved following the adoption of certain textbooks (Bhatt and Koedel, 2012; Koedel et al., 2017; Koedel and Polikoff, 2017).

One prominent multistate effort to increase the adoption and use of high-quality instructional materials (HQIM) is the High-Quality Instructional Materials and Professional Development (IMPD) Network, a multistate network supported by the Council of Chief State School Officers (CCSSO) to develop and implement strategic plans to promote the adoption and implementation of state-approved instructional materials and PL within their state (CCCSO, undated-b). Initially launched in 2017 with a cohort of seven states, 14 states participated in the IMPD Network as of the 2023–2024 school year.<sup>1</sup>

As SEAs engage more intensively in instructional policy and school and district improvement, limited SEA capacity has constrained their ability to support implementation at scale (Sunderman

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<sup>1</sup> Oregon joined the IMPD Network as a member starting in the 2024–2025 school year. However, Oregon is not studied as an IMPD state in this report, which focuses on the implementation and outcomes of the IMPD Network through the 2023–2024 school year.

and Orfield, 2006), necessitating increased attention to building capacity within these agencies (Bush-Mecenas et al., 2023; Childs and Russell, 2017). The IMPD Network represents a structured and systematic effort to support SEAs in building their capacity to engage strategically in policy design and implementation. The IMPD Network provides various supports for SEA teams (e.g., coaching, convenings that facilitate PL and peer learning across the IMPD states, supplemental funding) alongside a comprehensive roadmap of policy areas relevant to enacting skillful use of HQIM (e.g., signaling materials' quality and incentivizing selection, supporting PL, collaborating with educator training programs) and guidance on effective and locally relevant strategies to pursue these goals.

In this report, we draw on interviews, observations, document reviews, and survey data to provide a thorough documentation of *how* the IMPD Network supports the work of policymakers in their member states and whether these efforts have translated to the development of policy, policymaking capacity, and changes in teacher usage of HQIM and participation in HQPL. This research builds on prior RAND research that used data from the American Instructional Resources Survey (AIRS) to explore the use of standards-aligned instructional materials by teachers in states within and outside the IMPD Network (Doan et al., 2022; Kaufman, Doan, and Fernandez, 2021). This report addresses the following research questions (RQs):

- **RQ 1.** How does the IMPD Network support its member states, and how do member states perceive these supports?
- **RQ 2.** To what extent and in what ways has participating in the IMPD Network built capacity within SEAs to undertake policy change?
- **RQ 3.** What legislation, policies, and strategies do IMPD states use to achieve IMPD Roadmap goals? How do these approaches differ from non-IMPD states?
- **RQ 4.** To what extent are IMPD membership and state HQIM policies associated with (1) district processes for selecting instructional materials and PL opportunities and (2) teacher use of HQIM and participation in HQPL?

## History and Design of the IMPD Network

The CCSSO is a nonpartisan, nationwide, nonprofit organization of public officials who head SEAs. Around 2017, CCSSO began to organize collaboratives of state officials in response to feedback from state chief academic officers (CAOs) that, as the only people in such roles in their states, they did not have a ready community or network of role-alike peers. By 2014, several CAOs had begun working on HQIM policy in their states and wanted to share their successes in a collaborative meeting and conduct a site visit to see HQIM in action in Louisiana, where state policymakers had begun work to both identify HQIM and PL providers and incentivize their use within districts (Kaufman, Steiner, and Baird, 2019). After observing consistent, quality instruction in these schools, CAOs expressed their interest in participating in a network devoted to work that aims to implement state policy to effect consistent, positive changes to classroom practice. As one CCSSO leader explained,

And we're riding home on the bus and the CAOs were like, "I have never seen anything like that. I've never seen policy that happens at the state level change



## IMPD Network Assessed SEA Capacity and Provided Varied Supports

Initial recruitment into the IMPD Network was open to all chiefs (i.e., public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, the Bureau of Indian Education, and the five U.S. extra-state jurisdictions) who engage with CCSSO. To participate in a three-year cycle, a chief is required to assert that HQIM is one of the top five priorities of the state and one of its key academic strategies at the SEA level, demonstrated through inclusion in the SEA strategic plan or other planning documents. The CAO or equivalent is also asked to commit to being actively involved (e.g., leading team meetings, involvement in IMPD coaching and convenings) and lead the work for the SEA. Finally, the chief is asked to express understanding of the goals of IMPD relative to the IMPD Roadmap policy areas (e.g., 80 percent of districts adopting a particular mathematics or ELA curriculum in a given year will select HQIM) and commitment to collecting data on these outcomes.

Most states have renewed these cycles multiple times. In one case, a state has decided not to continue its tenure with IMPD because of a change in leadership and lessened prioritization of HQIM. Over time, new states have also joined the IMPD Network. New states that wish to enter the network and meet the required commitments are offered observer status (including an invitation to attend convenings) until a space becomes available to join as a full IMPD member (given the costs associated with providing regular coaching and implementation grants). When onboarded, new SEA teams attend a series of IMPD webinars that communicate the underlying evidence base for HQIM, the importance of using HQIM, and information about the IMPD Roadmap and potential strategies to advance HQIM work. These webinars also included panels of CAOs from current IMPD states sharing their experiences with new teams and dedicated time for the new SEA team to meet with their assigned IMPD coach.

When assembling their teams, most state teams include the CAO as leader with a designated project manager to help track deliverables and timelines and report out. Coaches work with teams to identify the right individuals to work on their teams. These typically include the director of curriculum and members of their team, administrators overseeing PL, administrators managing credentialing and educator preparation program (EPP) relations, and perhaps administrators working in school improvement.

State teams receive several additional supports as part of their membership in IMPD, including biannual convenings of all the IMPD state teams, their IMPD coaches, and experts; regular coaching; an annual grant of \$100,000 to support key deliverables related to their HQIM strategies; consultancies with other state teams or external partners to workshop strategic plans; webinars focused on specific content or research; access to experts in mathematics, English language arts (ELA), and science; EPP and vendor contacts; opportunity to apply for supplemental grant funding (\$40,000) to support their HQIM work; and a curated online repository of regularly updated resources; and monthly newsletters sharing news and updates on HQIM work. During our study, the IMPD Network added support via work groups, which provided focused resources on specific topics (e.g., science instructional materials, EPPs, working with regional service centers [RSCs]) through access to experts; virtual and in-person meetings; and additional funding opportunities.

## The IMPD Roadmap Defines Key Policy Areas, Allows for Varied Strategies

The IMPD Roadmap is the essential “backbone” and “infrastructure” that guides the work of IMPD states, according to IMPD staff. The IMPD Roadmap specifies the key policy areas and questions that states need to address to support HQIM, but it is agnostic in terms of the strategies and specifics of the work. In the words of one IMPD staff member,

CCSSO doesn't say, “You have to do this.” It's really more, “We know your state has to signal and incentivize it [HQIM].” So what's your definition [for high quality]? What's your floor [for materials that qualify as HQIM]? How are you going to signal [this to districts]? Are you an adoption state or a non-adoption state? What levers do you have at your disposal?

The IMPD Roadmap was initially derived from a collaboration of key Louisiana SEA staff and IMPD staff, with initial IMPD Roadmap elements based on strategies undertaken in Louisiana to signal HQIM and PL providers and incentivize their uptake (for more on Louisiana's state strategies, see Kaufman, Steiner, and Baird, 2018). This Roadmap identifies key policy areas that are necessary for the adoption and skillful use of HQIM and is intended to support the selection of locally appropriate strategies within each policy area. Revised twice since its inception (for more detail, see CCSSO, 2022), the Roadmap includes questions that encourage SEAs to consider typical moves and key considerations in state-level IMPD work (see Kaufman, Steiner, and Baird, 2018; Kaufman, Thompson, and Opfer, 2016).

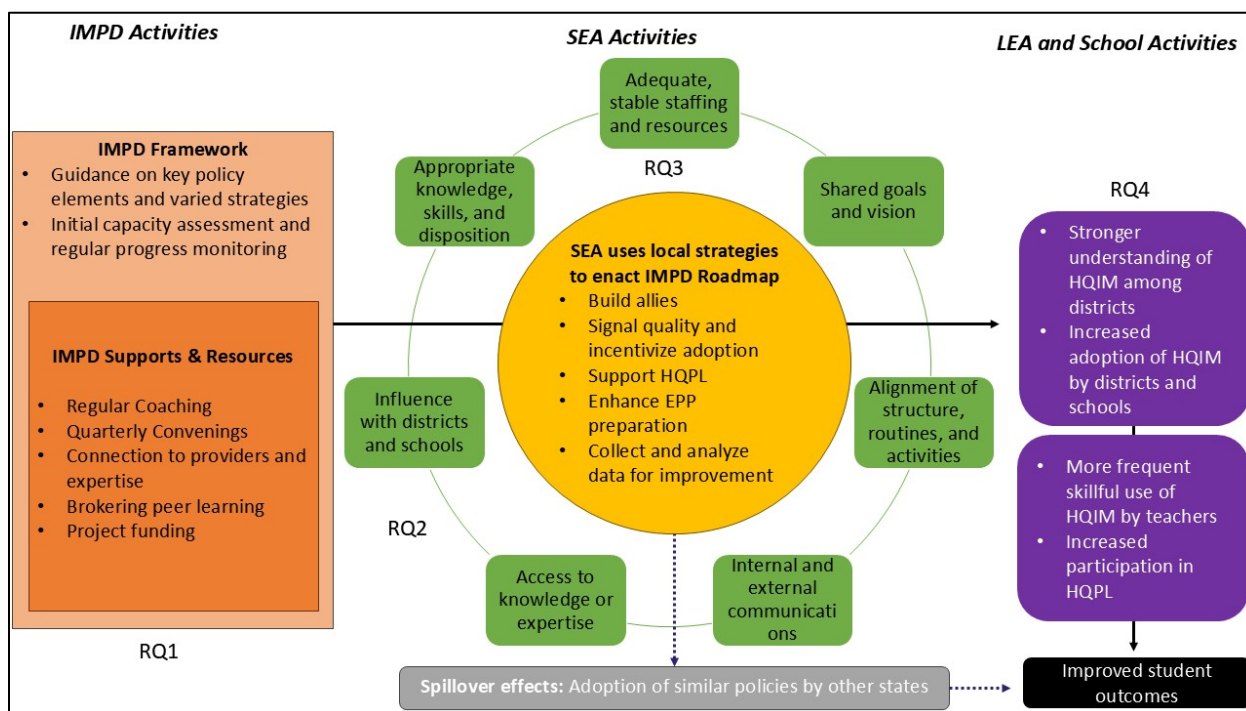
The Roadmap begins with states working on framing their HQIM work by gaining consensus on a theory of action and key roles and agreeing on desired outcomes and time frame. Next, states work on building allies and support for HQIM work. States then work on how to signal what quality looks like in instructional materials and PL, and how they will incentivize districts to select the materials. Broadening the work in a revision of the IMPD Roadmap, states also consider how to help university EPPs prepare teachers to recognize and use high-quality curricula. Finally, states consider how to develop indicators for their success across the HQIM work and collect and use data.

The IMPD Roadmap is not intended to provide directions for how specifically to implement HQIM policy, but rather offers areas and questions for SEAs to consider when doing this work. That said, the first two Roadmap policy areas (e.g., building allies; signaling quality and incentivizing adoption) require initial attention when entering the IMPD, because defining quality and communicating about how to select HQIM are prerequisites for PL, work with EPPs, or use of data on implementation.

## Summarized Theory of Action for IMPD and Organization of This Report

The IMPD Network was designed to assist states in pursuing HQIM-related policies, in part by building the SEA's organizational capacity and network of peer organizations to select effective and locally appropriate strategies and support strong implementation in districts and schools. Figure 1.2 summarizes this theory of action and maps it onto the RQs guiding this report.

Figure 1.2. Theory of Action for IMPD's Capacity-Building Support



Beginning at the left in Figure 1.2, we consider the **IMPD Network activities**, including their undergirding framework and structures and the provision of supports and resources (i.e., coaching, convenings, connections to experts, peer learning opportunities, and funding). These IMPD Network activities are intended, in turn, to support **SEA activities** (at center of figure). This is accomplished in part by building SEA organizational capacity to engage in strategic planning and implementation of HQIM policies. With these improved capacities, the IMPD Network activities also directly support the SEAs in selecting and implementing effective, locally appropriate strategies within each policy area of the IMPD Roadmap: building understanding and support for HQIM in the state, signaling the quality of materials and incentivizing HQIM selection, providing HQPL to teachers, aligning EPP training with HQIM, and collecting and analyzing relevant data on outcomes. The HQIM activities of IMPD states may also lead to spillover effects, because neighboring or peer states may adopt similar policies and practices.

Drawing on the varied literature on organizational and individual capacity building, we identified seven key elements of organizational capacity building most relevant to the work of SEAs (see Table 1.1). First, SEAs require appropriate human capital to advance their work. Substantial literature supports the necessity of having **adequate, stable staff with appropriate knowledge, skills, and dispositions** to move forward work in districts, SEAs, and schools (Childs and Russell, 2017; Claussen, 2011; Cosner, 2009; Cox et al., 2018; Fernandez and Rainey, 2017; Floden, Goertz, and O'Day, 1995; Howley and Sturges, 2018; Huffman et al., 2006; Jochim and Murphy, 2013; Kinghorn and Levinger, 2021; Moullin et al., 2019; Rogers, 2014; Sobeck and Aguis, 2007; Tanenbaum et al., 2015; Warren and Murphy, 2014). **Shared goals and vision** are considered crucial to guiding SEAs

and other public-sector organizations in supporting implementation (Fernandez and Rainey, 2017; Howley and Sturges, 2018; Jochim and Murphy, 2013).

**Table 1.1. Areas of State Capacity**

| <b>Capacity Area</b>                            | <b>Definition</b>                                                                                                                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adequate, stable staffing                       | SEA has enough staff to fully execute their functions and support policies, with little turnover.                                                                                                      |
| Appropriate knowledge, skills, and dispositions | The skills, knowledge, dispositions, and mindset that SEA staff possesses. Individual capacity can be built through formal and informal education and through experience.                              |
| Shared goals and vision                         | The extent to which the actors within SEA share similar, specific goals, priorities, or aspirations for their work.                                                                                    |
| Organizational alignment                        | The degree of alignment of the SEA's structure (e.g., departmental silos), routines (e.g., work processes), and activities (e.g., PL for district administrators).                                     |
| Organizational skills                           | The capacities held within the SEA, including the ability to use and make sense of data, internal and external communication skills, and methods of monitoring and supporting district or school work. |
| Access to knowledge and expertise               | The SEA's broader access to expertise through their networks, support providers, and other knowledge resources.                                                                                        |
| Influence with districts and schools            | The extent to which the SEA has the ability to influence districts and schools, through formal and informal incentives, authority, policies, and resources.                                            |

**Organizational alignment across SEAs** can play an important role in creating coherent practices and common messaging to districts and schools, particularly in SEAs with traditionally siloed departments (Childs and Russell, 2017; Cox et al., 2018; Kinghorn and Levinger, 2021; Moullin et al., 2019). Relatedly, **organizational skills** around communicating effectively within the SEA and with schools and districts may help support shared understandings, trust, and common priorities (Cox et al., 2018; Jones, 2001). Developing and leveraging **access to knowledge and expertise** is also a common strategy for SEAs to build their capacity (Childs and Russell, 2017), and these kinds of networks are thought to promote learning (Floden, Goertz, and O'Day, 1995). Finally, **influence with districts and schools** is an intuitively important element of successful implementation of state policy, reliant on building relationships, trust, and external partnerships (Cosner, 2009; Jochim and Murphy, 2013; Mitchell and Sackney, 2000; Sobeck and Agius, 2007). Together, these organizational and individual capacities will likely assist SEAs in driving changes to policies, strategies, tools, or practices in use across the district and local levels.

As shown at right in Figure 1.2, these SEA activities are intended to lead to changes in **district- and school-level activities**. Broadly, the policy areas of the IMPD Roadmap should contribute to a stronger understanding of HQIM and the principle of skillful use among districts and schools, increased adoption of HQIM, and more frequent skillful use of HQIM in classrooms, accompanied

by increased participation in HQPL. These changes to practices are expected to contribute to improved student outcomes.

This report is structured to address each set of activities (i.e., at the Network, SEA, and district and school levels) while considering the interrelations of each component of the theory of action. Following an overview of our data and methods in Chapter 2, we address our initial RQ (i.e., the boxes at left) in Chapter 3 by describing IMPD Network activities and the perceived quality and usefulness of these supports. In Chapter 4, we explore how these IMPD supports contributed to improving SEA capacity and what gaps in SEA capacity remained, using interviews with SEA leaders and IMPD coaches. In Chapter 5, we dig into the actual strategies that SEAs used to pursue the IMPD Roadmap (in the central box) by examining several forms of data: interviews with both IMPD and non-IMPD SEA leaders and IMPD coaches and through a systematic policy scan examining HQIM policy across the 50 states. In Chapter 6, we explore how the IMPD SEA policy strategies contributed to how districts understood HQIM, engaged in adoption and monitoring (captured through interviews with district leaders), and how teachers used HQIM in their classrooms or participated in HQPL as measured through the AIRS. Finally, we conclude in Chapter 7 with a discussion of our findings and their implications for intermediary organizations, such as CCSSO and the IMPD Network; SEAs engaged, or considering engaging, in work that advances HQIM policy; and funders of this work. In Appendix A, we present the analysis of our survey data. In Appendix B, we provide further descriptions of the 11 state-level HQIM policies that we coded as part of our policy scan analysis. In Appendix C, we present interview, observation, and artifact data and methods. This report should be of interest to these three main groups in their work around HQIM policy and potentially broader areas of state education policy work.

# Data and Methods

We used a mixed-methods approach that combined data from interviews, document review, and observations captured and analyzed over three academic years (2022–2023 to 2024–2025) with data from the AIRS from 2019 to 2024 to understand how the IMPD Network’s HQIM work played out across multiple levels. Specifically, we drew from semistructured interviews with CCSSO leaders and coaches, IMPD and non-IMPD SEA leaders, and district CAOs; observations of IMPD coaching sessions; analysis of IMPD documentation; a systematic analysis of HQIM policy across all 50 states; and data from AIRS of teachers in IMPD and non-IMPD states. Table 2.1 provides a mapping between these data sources and the RQs.

**Table 2.1. Overview of RQs and Data Sources**

| Question                                                                                                                                                                                                                  | Data Sources                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RQ 1. How does the IMPD Network support its member states?                                                                                                                                                                | <ul style="list-style-type: none"> <li>• Interviews with CCSSO staff</li> <li>• Interviews with IMPD coaches</li> <li>• Interviews with IMPD state teams</li> <li>• IMPD Network-provided documentation</li> </ul>                                            |
| RQ 2. To what extent and in what ways has participating in the IMPD Network built capacity within SEAs to undertake policy change?                                                                                        | <ul style="list-style-type: none"> <li>• Interviews with CCSSO staff</li> <li>• Interviews with IMPD coaches</li> <li>• Interviews with IMPD state teams</li> <li>• IMPD-provided documentation</li> <li>• Observations of IMPD Network convenings</li> </ul> |
| RQ 3. What legislation, policies, and strategies do IMPD states use to achieve IMPD Roadmap goals? How do these approaches differ from non-IMPD states?                                                                   | <ul style="list-style-type: none"> <li>• Interviews with CCSSO staff</li> <li>• Interviews with IMPD coaches</li> <li>• Interviews with IMPD state teams</li> <li>• Interviews with non-IMPD state teams</li> <li>• Policy scan</li> </ul>                    |
| RQ 4. To what extent are IMPD membership and state HQIM policies associated with (1) district processes for selecting instructional materials and PL opportunities and (2) teacher use of HQIM and participation in HQPL? | <ul style="list-style-type: none"> <li>• Interviews with district leaders</li> <li>• Policy scan</li> <li>• AIRS data</li> </ul>                                                                                                                              |

## Interviews, Observations, and Artifact Analysis

Our qualitative data collection and analysis included interviews, observation of coaching, and analysis of documentation. We conducted semistructured interviews with different stakeholder groups associated with the IMPD Network over the study period, which began in fall 2022 and concluded at

the end of 2024 (see Table 2.2). Each interview lasted around 60 minutes, followed semistructured protocols, and was transcribed prior to analysis. To analyze interviews, we used a variety of analytic techniques (see Appendix C), including deductive coding, case narratives, cross-case analysis, case-ordered meta-matrixes, and thematic analysis (Bush-Mecenas and Marsh, 2018; Miles, Huberman, and Saldaña, 2019; Saldaña, 2021).

**Table 2.2. Number of Interviews Conducted**

|                                  | <b>SY 2022–2023</b>       | <b>SY 2023–2024</b>       | <b>SY 2024–2025</b>       | <b>Total</b> |
|----------------------------------|---------------------------|---------------------------|---------------------------|--------------|
| IMPD hub staff and coaches       | 11                        | 9                         | 13                        | 28           |
| SEA leaders from IMPD states     | 20 leaders from 12 states | 26 leaders from 13 states | 17 leaders from 13 states | 63           |
| SEA leaders from non-IMPD states | —                         | 6 leaders from 6 states   | —                         | 6            |
| District leaders                 | 14 leaders from 10 states | 50 leaders from 22 states | —                         | 64           |
| Total                            | 43                        | 91                        | 27                        | 161          |

NOTE: SY = school year.

We also observed a total of 25 coaching sessions between IMPD coaches and the IMPD state teams that took place over the course of three convenings. We conducted nonparticipant observations, taking structured field notes, which were analyzed using case-ordered meta-matrixes. In addition, we analyzed secondary data obtained from IMPD coaches' monthly reports for all IMPD states from 2019 to 2024; coaches tracked state progress toward IMPD policy goals and state capacity to implement IMPD policy goals over time.

## Policy Scan

We conducted a policy scan of all 50 states and the District of Columbia to better understand the instructional material and PL policy environment within and outside IMPD Network states. Specifically, for each state, we reviewed publicly available state statutes, legislation, policy documents, and guidance documents and identified the extent to which each state had active policies or guidance in 11 areas related to instructional materials, PL, and educator preparation. For more information, see Chapter 6 and Appendix B.

## AIRS

We use data from the AIRS to understand the extent to which educators nationwide use standards-aligned instructional materials and participate in curriculum-based PL. The AIRS is a

nationally representative survey of ELA, mathematics, and science teachers that has so far been fielded from 2019 to 2024. The survey focuses on what instructional materials are used in K–12 classrooms, how these materials are used, and what supports, such as PL, are available for teachers to support the implementation of these materials. In this study, we use data from the 2019–2024 AIRS to examine the extent to which IMPD member states saw higher usage of standards-aligned instructional materials and participation in curriculum-based PL among ELA and mathematics teacher respondents in their states. For more information, see Chapter 6 and Appendix A.

## Limitations

The data sources and analyses used throughout this report help provide a rich description of the IMPD Network and how design and supports may have influenced state, district, and teacher behaviors. However, we note that each of these analyses comes with limitations. We describe limitations specific to each data source in the appendixes (Appendix A, B, or C) linked to each data source and in the sections of the report using each data source. Here, we describe several cross-cutting caveats to our analysis.

First, we rely primarily on self-reported interview and survey data. Although these data are valuable in providing details on processes, such as the development of state policy or the use of instructional materials, that are otherwise difficult to document, these self-reports may be prone to social desirability biases. Conversely, for the policy scan analyses, which rely on publicly available documentation, the level of detail offered in these documents typically pales compared with that captured in our interviews with state and district leaders. What these documents gain in objectivity of information is offset, at least partially, by a relative lack of detail on the nature of states' policy work (for more details, see Chapter 5). Next, we note that our analyses examining the relationships between states' IMPD membership and policies and teachers' use of HQIM and participation in HQPL are noncausal. States do not randomly join the IMPD Network. Rather, as we document later in the report, states explicitly opt in to the IMPD Network based on their interest in advancing their HQIM work and their perceived fit with the IMPD Network. Similarly, there is no such thing as exogenous adoption of HQIM policy because these policies come to fruition through careful, dedicated work on the part of state agencies.

## Key Terms

In this report, we use several terms that may be defined differently across districts and state departments of education. Below, we provide a list and define our preferred language for each term.

The term *IMPD Network* refers to the consortium of SEA teams addressing HQIM policy and the IMPD hub organization that supports these SEA teams. CCSSO staff, external consultants, and coaches form the *IMPD hub* that supports the IMPD network.

The term *instructional materials* refers to any materials intended to provide students with learning opportunities. These materials can be in printed form (e.g., textbooks), an online platform, or both. We broadly divide instructional materials into two categories: (1) *curriculum materials*, which are intended to constitute a full, comprehensive course of study for a particular subject and grade and

(2) *supplemental materials*, which refer to materials that provide support for particular units or concepts but do not constitute a full, comprehensive course of study.

Throughout this report, we refer to the IMPD's *Roadmap Policy Areas*, which are the five areas of policy work articulated by the IMPD hub that the member states use to organize their efforts to support the adoption of HQIM. Within these policy areas, each state developed and used its own set of strategies within these key policy areas. These strategies were sometimes drawn from national models, other states, and IMPD guidance; developed in collaboration with the IMPD coach; and selected and adapted to align with local state context and needs.

Many factors could categorize an instructional material as *high quality*. In this report, we use the term *high-quality instructional materials* (or *HQIM*) to refer to the instructional materials that states encourage districts to adopt and teachers to use. States can use several criteria to determine whether instructional materials are high quality, including alignment to academic standards and approval from local board members, educators, or other stakeholders. Many states, particularly those in the IMPD Network, use ratings of instructional materials provided by EdReports as a signal of high quality to inform their overall definition of quality, given state context. EdReports is a national nonprofit organization that rates instructional materials based on their alignment to college-ready and career-ready standards (EdReports, undated).

The term *professional learning* (or *PL*) refers to a broad class of guidance, training, and supports designed to improve teacher instruction and use of instructional resources. There are several types of PL opportunities, including PL communities, coaching, and workshops.

In this report, we focus on PL opportunities that are explicitly aligned with the curriculum materials or academic standards adopted in teachers' districts. Many states or PL providers describe this type of PL as "curriculum-aligned," "curriculum-based," or "curriculum-focused." We refer to these forms of PL using the broader term of *high-quality professional learning* (or *HQPL*) to align with our prior definition of HQIM.

*Educator preparation programs* (or *EPPs*) are designed to prepare aspiring teachers for licensure and careers as classroom teachers. EPPs are often divided into two categories: *traditional* EPPs, which are four-year undergraduate programs housed in institutes of higher education, and *nontraditional* or *alternative* EPPs, designed to train individuals to become teachers outside an undergraduate setting.

Last, states use various tools (e.g., legislation, formal and informal policy, communication, guidance) to influence the use and adoption of HQIM, the provision of HQPL, and EPP standards. For simplicity, we often use the catch-all terms *HQIM work* or *HQIM policy* to refer to the collective tools that states use as part of this work.

# IMPD Network Activities to Support State Policymaking

In this chapter, we present data and analysis related to RQ 1: How does the IMPD Network support its member states, and how do member states perceive these supports? This chapter draws from interviews with CCSSO leads, interviews with CCSSO coaches, interviews with IMPD state leads, observations of IMPD state team coaching, and documentation provided by the IMPD Network.

## RQ 1. How Does the IMPD Network Support Its Member States, and How Do Member States Perceive These Supports?

### Key Findings

- IMPD hub staff set clear expectations for states' incoming capacity, commitments, and policy focus and regularly monitored state team progress and adjusted support.
- The IMPD hub supports participating states through (1) the provision of IMPD coaches, (2) regular in-person convenings, and (3) facilitation of peer knowledge-sharing.
- IMPD coaches aid state teams in developing and implementing states' HQIM policy and facilitating connections to experts, vendors, and peer states.
- Virtually all IMPD states reported receiving strong coaching through the IMPD Network.
- In-person convenings provide dedicated time and space for state teams to work and are used to facilitate cross-state collaboration.
- Beyond coaching and convenings, the IMPD hub also supported peer learning through smaller workgroups on specific topics and centralizing knowledge management through shared resources.

## Coaches Serve as a Primary Source of Support for State Teams

IMPD coaches are consultants (rather than CCSSO staff), hired through CCSSO to work with specific states as part of the IMPD Network. Coaches were identified by IMPD hub staff based on their past experience and expertise with SEA-level work. In the words of one IMPD staff member, coaches are:

[s]easoned education leaders who can go toe to toe with CAOs and chiefs, and have those relationships and kind of are known in those spaces. And somebody who's very strategic and knows policy. And somebody who's a good consultant, who can do all the interpersonal stuff, facilitate meetings. Run, like, how do you help somebody do strategic planning even if they don't quite understand what strategic planning is?

The key role of coaches is to support states in identifying, developing, and implementing strategies for HQIM and brokering connections with other states to support strategy work. As one IMPD staff member explained, “It’s our coaches who are the diagnosticians,” who help teams to identify challenges, barriers, and opportunities and consider various strategies and solutions.

IMPD staff carefully matched coaches to states for a strong fit. One IMPD staff member explained that matching was very intentional and involved, considering prior experience with or understanding of state context and alignment of expertise:

We weigh a couple of things, I would say some of the coaches actually have prior experience working at or within that state, in particular. And so they might have a really strong understanding of the state context, the state players, the role that SEA has played. Other times they might not have direct experience with that state, but they might have direct experience with another state that has some similar context. And that they could be well poised for that. We also think a lot about the strengths of the coaches and priority areas for the state.

Following this assessment for fit, IMPD staff encouraged state team leaders to try out working with coaches to confirm fit. Once matched, coaches are expected to work with teams at least monthly. IMPD hub staff support coaches through initial onboarding; monthly virtual and annual in-person meetings for coaches to share their work, learn from one another, and plan together; and provide a shared collection of resources for coaches.

## **In All Years, Most State Teams Reported Receiving Strong Coaching Support Through IMPD**

All SEA teams shared that they met regularly with their coaches in all project years. The frequency of meetings varied from multiple times per week to monthly, depending on the state and the year of data collection. In 2022, most reported receiving weekly coaching, while about half reported receiving monthly coaching in 2023. By 2024, the majority of teams reported receiving biweekly coaching. Notably, coaching also involved various forms of meetings. For example, coaches often met weekly or biweekly with the state team’s main project manager while attending monthly team meetings and meeting as needed with other leaders.

Almost all state teams reported appreciation for and substantial benefits from IMPD coaching across years (10 of 13 states in 2022, 12 of 13 states in 2023, and 10 of 12 states in 2024). Most state teams reported that coaches helped their teams stay on track with IMPD Roadmap milestones (9 of 13 states in 2022, 9 of 13 states in 2023, and 8 of 12 states in 2024) and supported strategic planning (8 of 13 states in 2022, 11 of 13 states in 2023, and 8 of 12 states in 2024). In the words of one coach, these functions were crucial to their assistance with states:

Across all states, I’m guiding and supporting and acting as a critical friend on the development of or actually the execution of our strategic plans and the specific tasks in support of each of the goals within the strategic plans. And, in doing so, I meet with the leadership, I meet with the core team.

State leaders similarly emphasized this support, noting that coaching helped move their states beyond abstract visioning and toward clear, specific project planning. As one state leader shared,

Our coach has been essential at making sure our data plan . . . [Our coach has] worked with one of our IMPD team members extensively to support the data collection: the data, how we collect it, how we transfer it, how we make sure it's consistent when we do that all of those components. [Our coach] has been extensively supportive of that.

Furthermore, the majority of teams (9 of 13 in 2022, 6 of 13 in 2023, and 7 of 12 in 2024) reported receiving coaching support on project management and implementation logistics. This support moved beyond identifying a strategic plan, including such activities as engaging team members in creating timelines, identifying roles and responsibilities, working through procurement logistics, note-taking procedures and protocols for facilitating meetings, and other supports for implementation. As one state leader shared,

[Coach was] very clear in stating, "I am here to be your coach. I'm here as support. I'm not mandating or requiring you to do anything." But it's evolved with understanding of providing guidance and telling me where to put my focus if I didn't bring something up, or didn't consider something else. And also, where to push in on other members of my team as related to the data collection piece or putting some of the structures in place to make sure at the end, during the stock-take, it reflects all of the good work that is happening.

A few state teams also reported receiving coaching support around leadership and management techniques. These activities included co-facilitating meetings with state team members who might be newer to leadership roles and helping bridge connections with leaders in their organization. Coaches also played a role in direct assistance to state teams in nearly half of the IMPD states. For example, coaches helped complete IMPD documentation with the team and often assisted in drafting grant applications for funding from foundations or federal grants to support such HQIM activities as PL.

Coaches also helped serve as *connectors* in terms of partnerships, resources, and expertise. First, coaches helped identify high-quality vendors of curricular or PL services that were well-aligned to state priorities and managed the introductions of these vendors to their state team (particularly in earlier study years). Second, coaches helped gather research studies and other forms of evidence to help state teams make decisions and assisted the team in understanding these studies and crafting their communications plans. For example, one state team discussed their coach gathering the research on HQIM in mathematics and supporting the team in learning the key concepts and considerations relevant to this specific content area. Third, about one-third of state teams reported that coaches also helped bridge connections with CCSSO, other state teams, and experts. For example, one state leader emphasized the importance of the coach's role in providing these connections as follows:

[Our coach] is a great connector. When we think about something and we say, "We don't have any idea how to get started with this," [our coach] will give us lots of examples to consider. . . . It's an essential step for anything that you're doing that connects nationally, and you want to make sure that you're doing the right work and you're doing evidence-based work that is for the benefit of your state. So I think [our

coach] has been essential. . . . We might not be as connected to other states and other things with CCSSO without our coach.

Finally, a few state teams described how the consistency of their coaches had also helped support the teams during staffing changes and helped with onboarding new state team staff to the HQIM work. Three state teams provided specific examples of coach support in helping support new leaders or team members. One IMPD staff member, similarly, identified a key role for coaches ensuring continuity during such staffing transitions and “ensuring institutional knowledge isn’t lost.” In some cases, this leader noted, coaches can even help provide project management support while bringing new staff up to speed on the HQIM work.

Overall, state teams reported strong support for the coaching services they received through IMPD and found coaches to be well-versed in state policymaking and implementation and expert in HQIM. There were very few reports of challenges in coaching relationships among state teams. When these did arise, these challenges centered on misalignment between specific strategies and their local state priorities and context.

## Observations of Coaching Confirm Coach Role and Typical Coaching Strategies

In addition to gathering state team reports of coaching helpfulness and functions, we observed team coaching sessions during annual convenings over three years to understand the mechanics of coaching and the varied roles of coaches across teams. We found that, although IMPD hub staff provided coaches with substantial autonomy in defining their role, in the majority of observed sessions, the coach took responsibility for creating the agenda and facilitating the meeting ( $n = 21$  out of 25 total observations). For example, in one observation, the coach provided clear instructions regarding the meeting’s aim and directed the team through specific activities (e.g., reflecting on a particular topic of convening, taking notes in a specified document, working in smaller groups on team activities). In a few observed sessions, the coach instead shadowed the team leader, following their lead and checking in with them regarding how they wanted to use their coaching and time for the team to work. In one such example, the team leader asked team members to discuss their takeaways from a convening session they attended and asked clarifying questions relevant to their unique state strategies. In this case, the coach allowed all other team members to speak first before identifying a few common challenges observed by the team.

Coaches use three main strategies to engage with teams during observed coaching sessions: asking reflective questions (in 23 sessions), directly facilitating meeting activities (in 21 sessions), and providing advice (in 17 sessions). Coaches often helped guide the team discussion primarily by posing both guiding and follow-up questions, in many cases paired with offering advice once the team had a chance to reflect and identify challenges. For example, in one session, the coach began by posing guiding questions about the team’s strategic plan around PL, taking notes on their discussion, and asking follow-up questions. It was not until near the end of the coaching session that the coach identified another state that had overcome a common challenge and suggested that they connect with that state to compare experiences and possibly replicate their solutions. We found a few instances of other coaching strategies, such as observation and note-taking (14 sessions), providing and modeling

tools or protocols (8 sessions), making connections to other teams or experts (4 sessions), and providing expertise (1 session). We did not observe any meaningful patterns in which strategies were used across study years.

In the majority of sessions, coaches played an important role in helping foster communication among team members and in helping the team remain focused on its HQIM goals and strategies (in 21 and 19 sessions, respectively). This was evident in how coaches helped direct the time devoted to specific discussions and the involvement of team members. For example, in one observed session, the coach allocated equal shares of time to sharing the team's achievements (in this case, in establishing the infrastructure for mathematics curricular adoption data collection) and addressing areas for improvements (in this case, strengthening literacy networks, crafting communication with the mentor districts, mapping districts more effectively, and relationship building with district and school leaders). Throughout such sessions, the coach was attentive to the participation, often asking for contributions from various staff in the room. In terms of keeping teams focused on HQIM, coaches provided framing around the particular topics of discussion and also helped redirect general discussions toward the state's specific strategies.

## **IMPD Hub Staff Regularly Monitored State Team Progress, Adjusted Support**

IMPD hub staff take on an important role in monitoring the work of IMPD states through several avenues: semiannual state reflection documents called Stocktakes and annual data review; monthly coach reports on work with SEAs; and by examining patterns in these documents. First, state leads fill in the Stocktake document semiannually to provide IMPD hub staff with a sense of their successes and challenges. This document includes rubrics to self-assess progress across the Roadmap policy areas, alongside self-assessments of SEA capacity and cross-agency alignment, alongside documentation of relevant data collected by the state (e.g., rates of HQIM adoption disaggregated by student population), the AIRS, or other data sources. In particular, the rubric is, according to one IMPD staff member, intended to provide "a development opportunity for states to say, 'Where am I? What do I have to do next in order to improve?'"

Beginning in 2024, IMPD hub staff acknowledged the crucial importance of helping states to reflect on the sustainability of their HQIM work. Working with an external provider, the IMPD hub staff developed a revised Stocktake, including questions and considerations around sustainability on each policy area of the Roadmap. As one leader explained, these Stocktake additions included such questions as, "How are you institutionalizing this in your agency?" and "What are the structures, the meetings, the cross agency, inter-department team meetings?"

Second, coaches completed monthly coaching reports on the progress of their states, using similar rubric criteria as the Stocktake, including sustainability considerations. IMPD hub staff then hosted monthly coaching calls, which convened all IMPD coaches to reflect on common patterns in Roadmap or to support one another in working through emergent challenges. IMPD hub staff reviewed all monthly coaching reports prior to these meetings and, using those reports and the meeting discussion, identified useful resources or new webinars that might support common challenges or queries across IMPD states.

In these ways, IMPD hub staff took on an important role of monitoring and supporting the progress of coaches and state teams and then using these regular reports to inform common supports to teams (e.g., webinars, publications, convening themes). One IMPD staff member acknowledged the inherent, productive tension in looking for common challenges and barriers while fostering locally informed solutions:

One of my jobs is to look at the patterns across all the states and . . . to look for the trends and the patterns and try to bring them forward to the community so that people can learn and not reinvent the wheel, but knowing that they need to answer those questions for themselves in their state context based on their assets and their roadblocks.

Across these aspects of the IMPD design, the network's key activities, guiding frameworks, and support methods remained consistent over time. The IMPD Roadmap remained consistent and had only two fairly minor revisions. Coaching, convenings, and peer learning supports remained consistent, and the addition of optional work groups constituted the only more major modification. This consistency of the IMPD design and supports, over time, was also mirrored in the consistency of the involvement of states, and there were few adjustments to state membership. Next, we examine these support activities in greater detail from the perspective of state team members engaged in the IMPD Network.

## **IMPD Network Offered Convenings and Expert Connections to Support SEA Learning**

Twice annually, the IMPD brings together all IMPD state teams, along with their coaches, in a carefully curated multi-day convening. The content and approaches to learning in these convenings has differed over time to be responsive to the evolving needs of states:

So in the beginning, a lot of it [convening content] was about, how do you define quality? How do you signal quality? Now, it's a lot about PL and what does it look like and who's doing what, and taking what kinds of approaches. So we try to kind of meet them where they are.

Convenings involve some provision of content knowledge from experts along with consultancies—in which states gather to workshop the challenges or experience of a particular state—and cross-state learning time. All convenings also include time for state teams to meet with their coach for in-person planning. IMPD hub staff also bring in experts and vendors, from such organizations as EdReports or Rivet Education, academic researchers, and other subject-matter experts to provide support to states directly or in group settings. States often brought these experts back to their SEAs to provide PL to their agency. Last, the IMPD Network also provided a variety of additional supports, such as webinars, online consultancies, school visits, and a monthly newsletter of articles, research, and resources on HQIM.

## States Appreciated Dedicated Time and Space to Focus on HQIM and Valuable Peer Learning Opportunities at Convenings

All SEA respondents who attended convenings believed that these convenings were among the most important supports they received through IMPD. Most state leaders believed that their teams primarily benefitted from learning from their peers at these gatherings (8 of 13 in 2022; 10 of 13 in 2023; all 12 in 2024). As one state leader shared,

[At convenings] we had an opportunity to hear some presentations from other states and how they approached from a state perspective, implementing HQIM. So that was just helpful to hear some of the strategies that they used and kind of those tips and tricks.

In years one and two of the study, peer learning opportunities during convenings focused on sharing successes and challenges with strategic planning, policy approaches, and implementation (preparation, launch, and fidelity). In year three, the main themes were implementation (including data collection to monitor implementation) and sustainability strategies.

Another commonly identified benefit of convenings was in dedicating time and space to state team work on HQIM (6 of 13 in 2022; 8 of 13 in 2023; 4 of 12 in 2024). State team members stated that, in working on HQIM, they face competing demands on their time and attention from various state initiatives in their roles. These state team members benefitted from having built-in time and space to advance toward their HQIM goals. In the words of one state team leader,

I particularly appreciate the convenings that allow us to have consultancies and allow us to have that analysis and that protected time to do that and then bring our whole team together. So there's opportunities for like-roles so the EPP teams can meet together and then we can come back and share. But it's a protected time, right? Because we are all busy and having that protected strategic time allows us to dive in.

As this respondent shared, the various modes of involvement (e.g., consultancies, whole team time, role-alike or topic-specific time) helped support sustained engagement in HQIM during convenings.

Some state teams described benefiting from knowledge and information shared at convenings by IMPD hub staff and coaches, field experts, vendors, and other partners (4 of 13 in 2022; 3 of 13 in 2023; 7 of 12 in 2024). In addition to gaining valuable information about the impact of HQIM and useful strategies for adoption, signaling, and implementation, state teams also learned specific skills, including using and interpreting data and communicating with both internal and external partners. One state leader also noted that listening to experts on HQIM helped strengthen the motivation and buy-in of the team. As this leader shared,

Having guests like [professor of education] David Steiner actually speak [during convenings or webinars] kind of builds this common sense of purpose, of excitement, of all of us being able to step out of the day-to-day hustle bustle of our work at our agencies and come together at this convening and listen to someone who's driving a sense of urgency around the issues that we're working on. I think that those things are needed . . . moments of inspiration for our teams. For a larger agency like ours, we're also pulling together teams that live under totally different deputy commissioners who report to the commissioner separately. We are just not in the day-to-day quite as

close to each other. So I think, for all of those reasons, the convenings can be incredibly powerful.

These convening sessions and webinars helped some state teams to develop their collective knowledge and skills and helped individual state team members grow professionally (see Chapter 4 for further discussion of these organizational capacities). For example, one state leader described how they found that attending a convening and reading all of the provided resources helped them to “quickly get up to speed” when they took on a new role in curriculum and instruction in their state. Across all three years of the study, only two respondents experienced challenges with the fast-paced structure of convenings and felt overwhelmed by the amount of information shared.

## **IMPD Network Facilitated Peer Knowledge-Sharing and Learning Among States Through Various Additional Supports**

Peer learning, or the “orchestration of sharing among states” (in the words of an IMPD staff member), is a crucial aspect of the IMPD supports. By having otherwise isolated SEA leaders engaged with role-alikes and working together on a shared goal, the theory is that SEA leaders are uniquely situated to share ideas, promising practices, and ways of overcoming challenges with those who understand their complex work and are sensitive to the importance of addressing local context. An IMPD staff member also noted the importance of “very light peer accountability” as SEAs sometimes challenged one another’s preconceptions about what might be possible. One IMPD staff member shared an example of how this plays out in a form of consultancy session:

And so we’re going to do a critical friends review with . . . [state] on their strategy, and that’s a place where usually the state will come in and with the coaches help say, “Here’s the three things we were wrestling with, or the two things we were super wrestling with. Read our whole strategy, but here’s the two things we want to talk about.” And we’ll pick other states who have experience in those two things and bring them together. So some of it is about just creating a marketplace of ideas that people can pull from instead of inventing their own. So the context setting is knowing how fertile your land is, but you still need to figure out what you’re going to grow there. And so creating these different ideas, that help you from what you can sort of pick and choose and adapt so that it works in your context, is one of the things you get by being in a community instead of doing it just by yourself.

Coaches also played an important role in brokering peer learning by regularly sharing state challenges with one another to identify solutions or opportunities to directly connect state teams. IMPD hub staff also facilitated peer learning by developing resources on promising practices, in essence, “trying to see what looks like it’s working, codify it, share it.” These publications covered such topics as curriculum-based PL and the associated state levers.

In addition, the IMPD Network facilitates knowledge management and sharing by hosting Google Drive folders for each IMPD state: one private folder for just the state team and their coach to access to store all running meeting notes and work plans to track their progress and organize materials and one shared folder curated for the states by IMPD hub staff that would provide a plethora of additional resources.

## Almost All States Reported Engaging with Peers and Experts Through Various IMPD Supports

Almost all states reported strong benefits related to speaking with peers in other IMPD states through various IMPD supports (12 of 13 states in 2022 and 2023; all 12 states in 2024). Facilitated opportunities to engage with other states were regarded as the most beneficial support that they received through IMPD aside from coaching. As one state team lead described, there was a substantial benefit in garnering this kind of support from individuals who fulfill similar roles across states:

It's hard to articulate how beneficial it is to be connected to people who are in these very unique roles and very few people across the U.S. are in them who are working toward common goals and visions because, yes, you get resources, and you get insights into how they've done things.

As noted above, opportunities for peer engagement were often offered through convening activities and continued via IMPD-facilitated critical friends reviews, role-alike and work group meetings, and coach-facilitated interactions regarding common challenges or strategies.

The most common topics discussed during these peer engagement activities were shared problems of practice and emergent challenges in advancing their IMPD Roadmap–related strategies. State team members reported sharing promising strategies, how they overcame potential obstacles, and project management approaches for more-complex policy or practice changes. In a few cases, state team members described using documentation or tools that other states had developed as part of their IMPD Roadmap policy work. They were then able to adapt these tools or documents to their local context. In these cases, state team members noted that this was particularly useful because it provided a successful model for their strategy of choice and enabled them to avoid needlessly investing time and effort into developing these materials from scratch. In some cases, state team members described benefiting from discussing how to manage political tensions in their SEA work. The majority of state teams also reported leveraging these opportunities to help build their understanding of HQIM policy and practice around a specific subject matter, such as science, world language, or early literacy.

In addition to helping support peer engagement across the network, IMPD also supported states by introducing them to experts, support partners, and vendors to help move forward their HQIM work. The majority of state teams found these introductions helpful (11 of 13 in 2022, 9 of 13 in 2023, and 10 of 12 in 2024). IMPD helped broker these introductions by identifying a variety of quality vendors or support providers and providing opportunities for state team members to meet appropriate partners and decide how they might support their work. For example, SEAs sometimes had limits to their staff capacity. They benefited from leveraging support providers to help provide models, templates, or feedback on HQIM work, such as helping develop a curriculum support guide, developing PL materials, or supporting Multi-Tiered Support System guidance related to the use of HQIM. Support providers were also often used to provide PL services directly to districts, schools, and teachers. One state lead noted, “We say all the time . . . we wouldn't have made all the progress we have if we didn't have these partnerships.” IMPD Network activities that facilitated peer engagement and introduced states to experts and partners presented opportunities for states to develop broader and deeper networks to access knowledge and expertise (see Chapter 4 for further discussion of this organizational capacity).

In a few states, these introductions and the support to develop partnerships were less beneficial for IMPD participants. One state leader noted that the state already had strong connections and often had partners “banging down the door to do work” in the state. Another state noted that managing vendors requires SEA staff capacity, staff time, and purposeful management to ensure alignment in the work and related communications. This factor led the state to reconsider the extent to which it engages support partners.

## **State Teams Benefited from CCSSO Grants and Mini-Grants to Accelerate Progress**

Several state teams reported using supplemental state grants through the IMPD Network to further support their work (6 of 13 in 2022, 9 of 13 in 2023, 3 of 12 in 2024). Both the annual grants and mini-grants were highly beneficial to the state teams, mainly because state teams could use these funds flexibly and quickly to support their HQIM work. For example, one state team lead explained that bringing in a support provider to provide an HQIM training would ordinarily take a year to move the purchasing request through procurement. Instead, as this leader explained, “Those grants allow us to execute strategy much more efficiently and effectively than going through our entire statewide procurement process just because of the time that it takes to do that.” In this way, IMPD grants allowed for more-timely access to PL providers, the ability to quickly set up necessary dashboards or other databases for implementation data collection, or access to experts to support the creation of rubrics for assessing curricular quality. In isolated cases, state teams used these grants to study internal coherence in the SEA and facilitate alignment of their HQIM work or support their work with districts and regional educational service centers around HQIM.

# Building Capacity for SEAs to Enact Policy Change

In this chapter, we present data and analysis related to RQ 2: To what extent and in what ways has participating in the IMPD Network built capacity within SEAs to undertake policy change? This chapter draws from interviews with CCSSO leads, interviews with CCSSO coaches, interviews with IMPD state leads, observations of IMPD state team coaching, and documentation provided by the IMPD Network.

## RQ 2. To What Extent and in What Ways Have IMPD Network Built Capacity Within States and SEAs to Undertake Policy Change?

### Key Findings

- Drawing from the seven areas of state capacity that we outline in Chapter 1, IMPD coaches emphasized the importance of three of these capacities for states to progress on policy goals: (1) shared goals and vision, (2) adequate, stable staffing and resources, and (3) internal and external communications skills.
- IMPD state leaders said IMPD supports led to improvements in (1) aligned structures, routines, and activities, (2) access to knowledge and expertise, and (3) individual knowledge and skills.
- IMPD state leaders cited continued need to develop (1) adequate, stable staffing and resources and (2) aligned structures, routines, and activities

## How Do States Think the IMPD Network Has Contributed to Their Capacity?

The IMPD Network has provided supports and guidance to help build the organizational capacities of state teams to enact their IMPD Roadmap goals. Drawing on our literature review and as previously reported in Table 1.1, we examine the extent to which seven core elements of organizational capacity were relevant to IMPD Roadmap progress: adequate, stable staffing and resources; shared goals and vision; aligned structures, routines, and activities; internal and external communications skills; access to knowledge and expertise; influence with districts, schools, or other agencies in the state; and individual knowledge, skills, and dispositions.

## Coaches Described the Importance of Shared Goals and Prioritization of HQIM, Stable Staffing, And Strong Communications

To begin understanding how capacity was developed through IMPD support activities, we first asked coaches to identify the necessary capacities that state teams need to make progress in the IMPD Roadmap policy areas, most coaches described the value of having shared goals and priorities, particularly among leadership, stable project management staff, and strong communication skills both internal and external to the SEA. For example, one coach described the importance of developing a strong shared goal and vision for HQIM to facilitate implementation in complex SEA settings. As this coach explained:

I think the commitment, the mindset, the passion for this agenda is what drives the first set of changes because every agency is capacity strapped. Every [SEA] agency has incoherence designed into its agency. Everybody's org chart is loopy, but people can combat all of that if they believe in it.

Other coaches similarly emphasized the importance of having senior leadership support for HQIM and dedicated project management staff to move the work forward. As one coach summarized,

I think support from the leadership is a critical piece. If the Secretary [of Education] doesn't believe in it, then the staff isn't going to do it. If it's not a state priority, then it's not going to happen, so I think that's another piece. And then I think what I said earlier about capacity, there needs to be someone or a team of someones who get up every day and think about this. And have all of the facets related to the adoption and use of HQIM be what they do every day. And I think if it's not a state priority and if there isn't someone there who's focused on it, and if no one understands what you're talking about, it's not going to happen.

As this coach described, a third important capacity, from the perspective of coaches, was the ability to communicate internally and externally about HQIM using clear and consistent terminology and messaging.

## State Leaders Attributed Improvements in Alignment, Access to Expertise, and Individual Knowledge to IMPD Supports

With these key capacities in mind, we asked state team leaders to describe how their organization's capacity to implement the IMPD Roadmap policy areas had changed as a result of IMPD support (e.g., coaching, convenings, peer learning). Across years, the majority of state leaders believed that IMPD supports had helped them to create better alignment across their agency's departments, structures, and routines (see Table 4.1). State teams often discussed their SEA context as somewhat siloed, in which different departments pursued different priorities with varied strategies, activities, and structures for their work. This lack of alignment presented challenges for supporting HQIM work because this work touches various departments directly, such as curriculum and instruction, school improvement, teacher evaluation, teacher credentialing, and involves broader SEA procedures or resources, such as procurement, communications, and data management. State teams reported that IMPD Network supports helped them to "further this initiative across the agency" and

to collaborate “not just within our office . . . but also with our other operational teams.” One state team leader described this challenge and capacity-building effort as follows:

So the challenge there is to un-silo that work. People deeply own and care about the workstream that they have and what their typical work is. And so really thinking through, I think one of the major tenets of what we were saying is that it is everybody’s job—any person who has instructional responsibility for students—to make sure that all of our students have access to HQIM and that we use that grade level material as the basis for instruction, of course, with appropriate support and access points.

For example, using this shared framing of HQIM as a priority, this state team identified a cross-functional team from across relevant departments to work together on special education and student supports related to HQIM. Whenever they put out resources, they share the work with the team, their consultants, and a district support team to reinforce the work. State teams reported working to align with other SEA departments or functions on shared priorities, common understandings and language, and by agreeing on streamlined work processes.

**Table 4.1. Improvements in SEA Capacity Attributed to IMPD Network Support**

|                                                                   | <b>2022<br/>(13 States)</b> | <b>2023<br/>(13 States)</b> | <b>2024<br/>(12 States)</b> |
|-------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Adequate, stable staffing and resources                           | 4                           | 0                           | 7                           |
| Individual knowledge, skills, and dispositions                    | 7                           | 6                           | 8                           |
| Shared goals and vision                                           | 5                           | 5                           | 5                           |
| Aligned structures, routines, and activities                      | 5                           | 9                           | 9                           |
| Internal and external communications skills                       | 3                           | 4                           | 7                           |
| Access to knowledge and expertise                                 | 9                           | 8                           | 5                           |
| Influence with districts, schools, or other agencies in the state | 4                           | 2                           | 9                           |

NOTE: This table shows the number of IMPD states where interview respondents noted that each capacity was developed and improved through support from the IMPD Network. The number of total states in parentheses, noted in the column heading, refers to the number of IMPD state teams that participated in interviews.

The majority of state teams also thought IMPD support helped them build their networks to access expertise and specialist knowledge in HQIM. This was especially true in 2022 and 2023, when nearly three-quarters of state teams described building this capacity through IMPD support. Typically, these state teams described expanding their network in terms of access to: (1) SEA leaders in other states who could provide advice on challenges and promising practices (or, as one state leader described “the good, the bad, and the ugly” of state-level HQIM work), (2) vendors and support providers with strong expertise working with a variety of states (in the words of one state leader, “It’s more efficient sometimes and more effective if you bring in somebody with the perspective, having

worked in 25 states versus just you and your team taking on design or development or facilitation,” and (3) academic experts in HQIM.

State team members also discussed how IMPD support helped develop their individual knowledge, skills, and dispositions to engage in HQIM work. State team members noted improvements (1) in their expertise in curricular quality and instructional use and (2) in their knowledge of strategic planning and project management techniques in several ways. First, state team leaders described developing a deeper understanding of the knowledge base of pivotal research related to HQIM use, which lent credibility to their communications and broader work. Second, state team leaders described building their capacity in strategic planning, or “how to be more strategic in a really specific way,” as one state leader explained. Another state leader expanded on this point, explaining how their team had strengthened their ability to think about policy tools and strategies:

The IMPD has helped my team think about how to develop policies, leverage funding sources, develop clearer messages, make the case, collaborate across the agency, persuade districts and coach districts on how you do the same things. . . . It’s helped them become really strong state policy leaders.

In addition, state leaders described benefiting from improved project management skills, which they often learned from their IMPD coaches. Examples included tracking tools, procedures for auditing and evaluating projects related to specific funding streams, and facilitation protocols and meeting structures for managing larger or more complex teams.

A smaller proportion of state teams across years believed that IMPD support had helped them to ensure shared goals and vision around HQIM in their SEA and improved their ability to influence districts and schools to adopt and use HQIM. In many ways, ensuring shared goals and vision around HQIM was a prerequisite for joining the IMPD Network because states were required to demonstrate strong, involved support of the CAO and a commitment to HQIM in their strategic plan. Nonetheless, as one state team lead remarked, IMPD supports helped them “cut through the white noise” and “really identify and establish a clear definition for high quality and what do we mean by high-quality resources.” Another state leader noted that having these clear definitions for HQIM was critical, particularly when working with individuals who support schools across SEA offices and in varied roles. A few state teams also noted that these clearly stated definitions and strategic plans associated with the IMPD Roadmap helped them maintain the prioritization of HQIM when they experienced staff turnover.

Notably, nearly three-quarters of states in 2024 reported building capacity in district influence, compared with fewer respondents reporting this in prior years. These state teams reported purposefully building their influence with districts and schools by conducting many open meetings with stakeholders from districts and schools to discuss HQIM and understand local priorities in preparation for the rollout of PL activities. As one coach explained,

The real capacity-building comes with some of our nudging to go into the field, observe the work, convene the leaders from your [RSCs], listen to them, take questions to a site visit as opposed to a checklist, which is what districts are accustomed to from state leaders, like change that narrative that you too are a learner in this process, and I think that has yielded some real positive growth and increased capacity to support districts.

The observed shift in reported capacity built in influencing districts over time may be a function of increased IMPD support for implementation and PL in 2024, which necessarily involves building district and school commitment.

Finally, some states (over half in 2024) reported that IMPD supports helped improve their internal and external communication skills as an SEA. State team leads mainly reported strengthening the alignment of their communications, such that their message was consistent across SEA departments and from multiple SEA departments to districts and schools. As one team leader described, IMPD supports “enhance our capacity because districts are hearing the same message from multiple sources.” Multiple state team leaders emphasized the importance and challenge of this kind of aligned communication because, as another state leader shared, it is “very complex to get all the way from the state level into the classroom.” In most cases, these state team leaders credited the assistance of coaches in helping them to craft communications plans and messaging and in developing common language and understanding through convenings with supporting aligned communications practice. As one state team leader noted,

One thing that I noticed among us is just our articulation of the work has been tighter and we are assured that our teams are doing the same things, which means then all of our documents, our resources, our initiatives that we roll out are also doing the same thing. And so it’s just a much cleaner communication around the work because we all really are—we have a shared language, we’re talking about it the same way . . . we definitely realize how much of a positive impact it makes now because we can move the work faster because school systems are hearing the same thing. It doesn’t feel as disjointed on their end.

## **Despite Capacity Improvements, State Leaders Reported Needing Additional Capacity-Building in Several Areas to Support HQIM**

The most commonly discussed area in which state teams reported needing additional capacity was stable staffing and resources (see Table 4.2). The majority of states noted that they experienced constraints in the number of staff to complete their work, which limited the services they could provide to help support districts and schools in using HQIM. A few states noted that, given limited resources to support regular staff, they used available funding to contract with external support providers for particular services. This led to challenges, however, in managing contract workers and ensuring alignment with SEA priorities and strategies. In the words of one state team leader,

I think staffing, like organizational staffing, often is the limiting factor in what we can do. If we had more people, we could do more things. I think even when we have money and we can contract out a lot of the work, it’s still not as good as if we were actually able to do the work ourselves just because of the local context and the nimbleness of just being an agency employee as opposed to contracting with someone else to do specific set of work.

Another staffing challenge arose from frequent turnover of both staff and senior leadership. New staff and leadership required that state teams invest time and effort into developing a common understanding of HQIM and maintaining the prioritization of HQIM.

**Table 4.2. SEA Capacity That Still Needs to Be Developed to Support HQIM Work**

|                                                                   | <b>2022<br/>(13 States)</b> | <b>2023<br/>(13 States)</b> | <b>2024<br/>(12 States)</b> |
|-------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Adequate, stable staffing and resources                           | 10                          | 8                           | 9                           |
| Individual knowledge, skills, and dispositions                    | 2                           | 6                           | 8                           |
| Shared goals and vision                                           | 1                           | 2                           | 4                           |
| Aligned structures, routines, and activities                      | 9                           | 7                           | 8                           |
| Internal and external communications skills                       | 7                           | 7                           | 4                           |
| Access to knowledge and expertise                                 | 1                           | 1                           | 0                           |
| Influence with districts, schools, or other agencies in the state | 8                           | 6                           | 4                           |

NOTE: This table shows the number of IMPD states where this capacity was identified by interview respondents as in need of development to support the HQIM work. The number of total states in parentheses, noted in the column heading, refers to the number of IMPD state teams that participated in interviews.

Despite reported improvements in their SEA alignment, most state teams still identified a lack of alignment and department siloing as challenges requiring additional work.

The bureaucracy seems at times endless. It will take you three months to have a contract in place to do this work or you want this school system to receive this allocation of funding, but it's going to take four months to get them the money to do it. . . . There are things like that that I think that just come with being a state agency that sometimes just cycles the work or definitely, I think keeps it from progressing as quickly as we would want to.

In some cases, turnover in leadership or substantial staff turnover upended efforts to improve alignment as new leaders and staff brought differing priorities or understandings of the work.

Communications also continued to present challenges. In particular, states noted that differing priorities and activities across SEA departments (lack of alignment) created further challenges in maintaining clear, consistent communications with districts. As one state leader shared,

And so, that's why the collaboration and calibration is critical across the departments because otherwise there's a lot of good work happening, but it's happening fragmented and in silos. And what happens for LEAs [local education agencies], they will either choose the thing that they like from the people that they like, or they'll dismiss it all and assume that the department doesn't know what they're doing. "The left hand doesn't know what the right hand is doing, and you're trying to tell me and I'm in it every day and you don't even know from your lens what it's supposed to look like. This department is telling me this, this department is telling me this." I tell my team all the time, LEAs don't hear curriculum instruction or assessment, they hear the Department of Education. And if it came from the Department of Education, they assume that we all know what the other person is doing.

As this tension illustrates, organizational capacities were often interrelated and required support from multiple perspectives.

## SEA Leads Appreciated IMPD Directing Time, Attention, and Space to HQIM

About a third of state team leads expressed a strong appreciation for the role of IMPD activities, in particular convenings, in directing time, space, and attention toward their HQIM work. By participating in IMPD, state team leads reported that they were better able to prioritize their HQIM strategies and devote their staff's time and attention to this work.

What I can tell you about the team that I work with is that they are very appreciative of having the time and the ability to think through and problem solve. And really even just the fact that it was through the network that we were able to create the HQIM team and the systems that we're using for evaluating curriculum materials.

Another state lead stated, "The IMPD Network has brought the curriculum team together around some really common focus areas."

The convenings were a particularly powerful means of directing team time, attention, and space to HQIM work, as SEA staff left their fast-paced, demanding roles to spend a few days focused on these priorities and working together. In the words of one state lead:

I will just say that the in-person convenings have been the most powerful thing for us. So it kind of . . . it forces us away from all of those daily demands and really gave us space and time to brainstorm together, to plan, and to have rich conversations about the future of the work and even just internally. I'm not even talking about in our other state level meetings, just for our internal team, it was so helpful. . . . [At the next convening] we'll all again be there together, have our away office messages on during that time.

A coach echoed these sentiments, noting: "One of the main roles that it [the convening] plays for them is it's a forcing mechanism to get people together."

Another state lead pointed out the benefits of hearing from expert speakers at convenings, who helped motivate them and direct their attention to the importance of HQIM work. In the view of some IMPD state team leaders, these kinds of expert presentations helped build and maintain motivation among team members from varied departments. As this state team leader explained,

I think having guests like her [recent speaker at convening] actually speak kind of builds this common sense of purpose, of excitement, of all of us being able to step out of the day-to-day hustle-bustle of our work at our agencies and come together at this convening and listen to someone who's driving a sense of urgency around the issues that we're working on. I think that those things are needed cultural moments of inspiration for our teams. And again, for a larger agency like ours, we're also pulling together teams that live under totally different . . . [department leaders] who report to the . . . [senior SEA leader] separately. We are just not in the day-to-day quite as close to each other. So I think these, for all of those reasons, the convenings can be incredibly powerful.

These opportunities to focus efforts and the capacities developed by IMPD support were in place to support SEAs in their use of legislation, policies, strategies, and tools to promote HQIM adoption and use in schools. Next, we explore these approaches to change.

# Policies, Strategies, and Tools SEAs Use to Advance HQIM

In this chapter, we present findings related to RQ 3: What legislation, policies, and strategies do IMPD states use to achieve IMPD Roadmap goals? How do these approaches differ from non-IMPD states? We draw on interviews with IMPD and non-IMPD state leaders to describe the development and implementation of HQIM policies and a national review of publicly available documents to describe the state of state HQIM policy as of April 2024.

## RQ 3. What Legislation, Policies, and Strategies Do IMPD States Use to Achieve Roadmap Goals? How Do These Approaches Differ from Those of Non-IMPD States?

### Key Findings

- IMPD state teams and IMPD coaches reported progress on all five IMPD Roadmap policy areas, and especially strong work was done on signaling high quality materials and professional development.
- IMPD state work on strategies targeting EPPs is more recent and, subsequently, less developed relative to work on other strategies.
- Some non-IMPD Network states implemented similar HQIM-related strategies as IMPD Network states, but at a more limited scale and with less evidence of alignment.
- As of April 2024, IMPD Network states were more likely than non-IMPD Network states to have policies related to HQIM and curriculum-based PL.
- Because of recent Science of Reading legislation, both IMPD and non-IMPD Network states were more likely to have HQIM-related policy for reading and literacy instruction in elementary grades than in other grades and subjects.

The IMPD Roadmap is the essential framework that identifies the key policy areas and questions that states must address to support HQIM. However, the Roadmap is agnostic in terms of the strategies and specifics of the work. First, states completed a two-part process of framing their HQIM work including identifying a theory of action, key roles, target outcomes, and time frame. Next, the state team identified the key strategies they plan to use to pursue each of the following core IMPD Roadmap policy areas:

- **Policy Area 1.** Communicate with, learn from, and gain support from allies for HQIM work.

- **Policy Area 2.** Increase local education agencies' selection and use of HQIM by signaling the quality of instructional materials and incentivizing their selection and use.
- **Policy Area 3.** Increase the number of teachers participating in HQPL that is grounded in skillful use of HQIM.
- **Policy Area 4.** Increase the number of EPPs that prepare new educators to identify and skillfully use HQIM.
- **Policy Area 5.** Collect and analyze data to support continuous improvement and understand outcomes.

Broadly, states in the IMPD Network used a variety of formal and informal policies and strategies to incentivize HQIM adoption and use among districts. For example, a minority of IMPD states *required* districts to adopt HQIM through legislation. In contrast, most states *encouraged* districts to voluntarily adopt HQIM via incentives or support, such as guidance, tools, funding, and technical assistance, to support relevant stakeholders in their HQIM journeys (e.g., districts, EPPs, RSCs). Even states with formal legislation requiring HQIM adoption paired this policy with additional incentives and supports. Additional strategies and supports for HQIM adoption and implementation included published guidance on selection and adoption processes, funding, technical assistance, or reduced barriers for districts to adopt HQIM or HQPL, such as by streamlining purchasing processes.

We describe the progress IMPD state teams made in each of the IMPD Roadmap policy areas using interview data and IMPD coach ratings. We then look at a subset of HQIM policies across all IMPD and non-IMPD states as part of a policy scan to understand national trends as of April 2024.

## On the Whole, Both State Team Leaders and IMPD Coaches Report Greater Progress on Initial Roadmap Policy Areas

Throughout this study, IMPD state teams reported strong engagement and progress in the first four IMPD Roadmap policy areas: building allies, signaling quality, incentivizing adoption, and providing HQPL. This was evident in Figure 5.1, which shows the percentage of monthly coach reports where coaches rated states as Green in a particular IMPD Roadmap policy area, signifying that the state was on track in that particular policy area.<sup>3</sup> Coach reports indicate that states were most likely to make progress in the following areas:

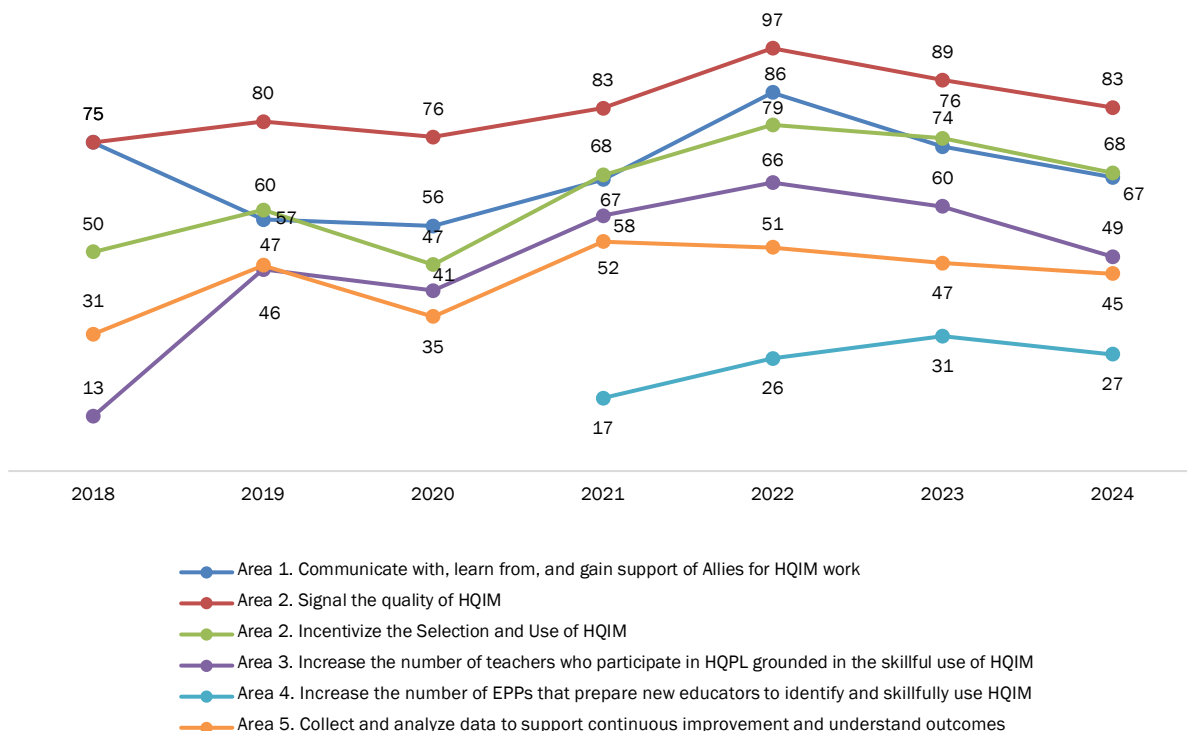
- Policy Area 2, in which 83 percent and 68 percent of monthly coach ratings were Green in 2024 (signal the quality of HQIM and incentivize the selection and use of HQIM), respectively
- Policy Area 1 (communicate with, learn from, and gain support of allies for HQIM work) was rated Green in 67 percent of coach report ratings in 2024.

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<sup>3</sup> Coaches rate state progress on each policy area using a four-point scale (Green, Yellow, Orange, Red). Policy Area 2, "Increase LEAs' selection and use of HQIM by signaling the quality of instructional materials and incentivizing their selection and use," is separated into two different categories on the coach reports, "Signal the quality of HQIM" and "Incentivize the selection and use of HQIM."

IMPD Roadmap policy areas in relative need of growth were related to Policy Area 3 (increasing the number of teachers who participate in HQPL), Policy Area 5 (collecting and analyzing data), and Policy Area 4 (increasing the number of EPPs)—the last of which was rated Green in only 27 percent of coach report ratings issued in 2024.

**Figure 5.1. Percentage of Coach Roadmap Progress Ratings with On-Track Ratings**



NOTE: This figure shows the percentage of *IMPD coach month × state ratings* across six IMPD Roadmap areas that were Green (considered on track). These percentages aggregate across all month × state ratings across the entire IMPD Network in a given year.

Reflecting the vision of IMPD hub staff, state team leaders and coaches believed that building allies, signaling quality, and incentivizing adoption were crucial initial steps to support ongoing efforts to support teachers in learning to use HQIM and monitoring HQIM adoption and use. One state leader summarized the importance of addressing early steps as follows:

We were really focusing on communication within our first year. It's one of our first priorities. And one thing we did is we wanted to first build common understanding and language and purpose at the SEA level. Making sure that we all had a common understanding of why we were doing this work and how the interdependence would work amongst all of our leaders and units and offices within our SEA . . . We didn't want to move too quickly into steps that would not be helpful and not saturate the state. So that was really our goal and I think we did a lot of that in the first two years and we went slow to go fast.

This enhanced focus, however, was often in addition to continued efforts around signaling and incentivizing HQIM. State leaders reported that they needed to continue concurrently supporting HQIM selection and HQPL for skillful use, because districts adopted HQIM at different rates. That is, some districts adopted HQIM early on and were ready for support in helping their teachers to use the materials, while other districts had not yet moved into HQIM adoption. In addition, states needed to continue their work around signaling and incentivizing HQIM when expanding their HQIM work to additional subjects or grades or when faced with updated state standards. Almost all states (12 of 13) integrated information on HQIM selection and adoption into the HQPL for teachers around skillful use.

## **Policy Area 1. Communicate with, Learn from, and Gain Support of Allies for HQIM Work**

All of the IMPD Network states engaged in ally-building and communication efforts aimed (1) to develop a shared statewide understanding of HQIM, what it means, and why it matters for their states and (2) to establish statewide goals for HQIM adoption. Most state teams (10 of 13) leveraged research, evidence, and expertise about HQIM's effectiveness to educate stakeholders about HQIM, persuade them of its value, and share how the IMPD Network helped connect them with that research and expertise. Early in the IMPD Network's work, teams leaned on national data and expertise—for example, a few state teams connected with David Steiner, professor of education at Johns Hopkins University, during this phase of their work.

We had, like, David Steiner come early on . . . and the goal wasn't like, "Here's the professional development, you need to now go off and launch all this work on your own." But to just start to engage people, get them thinking about different things, because then that was usually followed by us doing some deeper work with districts.

As districts began adopting and using HQIM in IMPD states, many states used local evidence, such as case stories from districts or schools using HQIM or local data on levels of adoption and use. For example, one team leader shared how valuable these sources of local evidence and data are in building support for HQIM among state stakeholders. In their words,

What is helping to move forward those road map strategies? I think it's having case studies, stories, examples of where it is working, research and resources that we can point to. So, when we put together a PL, or if we have to go talk to our [cross-agency] Council, or we have to go talk to a group of [institutions of higher education] that we've convened, or whoever, or legislators, we have all of those resources at our fingertips that we can pull from, and say, . . . "Here's what we know high-quality materials." And then, it gets them to start listening.

More than half of the IMPD states used case stories drawn from what they deemed as bright spots of HQIM implementation. These state team leaders shared stories of teachers, schools, and districts who were early HQIM adopters via different media. For example, one team leader shared that the team developed a unified strategy to gather, evaluate, and communicate these stories. In the team members' words,

[We are] really using the district and school level coaches to point out who is excelling and who is seeing gains [from HQIM]. We have a communications plan and a member of our communications team who is charged with elevating [those stories]. Even on social media, and we have a [statewide] teacher online magazine.

Most state teams, with support from their IMPD coaches, developed communications tools, such as slide decks, talking points, and even presentation books, to facilitate communications. These tools ensured that the messaging around HQIM was consistent across various stakeholders and levels of the system by “making sure that people didn’t have to think about what the message was.” Another state lead noted the importance of integrating the broader evidence into slide decks and other communications materials, sharing, “I think the [IMPD] network built our capacity to have a compelling message that had elements of success from across the nation.” See the “Spotlight Example of Building Support from Allies in Arkansas” box for more on Arkansas’s approach to communications in addressing this policy area.

State teams also developed unique ways to engage stakeholders. For example, one state team created opportunities for district leaders to observe HQIM in action. As team members explained, “We will fly out our superintendents to go see a strongly innovating and implementing district in this area, and it’s so much more impactful than anything we could say to them in a PowerPoint presentation.” Another state team created an award to honor EPPs that had embraced HQIM in their teacher training supports. Yet another state described how they used open convenings to incorporate feedback from stakeholders, limiting perceptions that their HQIM work was “top-down” with the SEA “telling you what to do.”

Over half of the IMPD states emphasized the importance of doing internal work on forging alliances within their agencies alongside their work with external stakeholders. This included developing a common understanding of the importance of HQIM within their SEA and across departmental divisions. As one state team leader noted, these internal communications efforts were not only focused on building support and shared understandings but also on ensuring that communications from various departments were consistent on the topic of HQIM:

What are the big pieces of coherence that we need to be aligned on [in our SEA], in order to support and not send mixed messaging to our LEAs [local education agencies]? I think that was a nice jumping-off point for us to deepen our work. So really explicitly, we’re starting to look at what are the bigger instructional links that we really want to support either within our division or across the agency? . . . That created a lot of impact and conversation and thought. It was thought-provoking for us as an agency.

As this leader explained, it was particularly important to identify how the HQIM work fit into priorities across the agency. For example, one state leader described framing HQIM as a key aspect of their state’s focus on Multi-Tiered Systems of Support as an effective form of Tier 1 instruction. Another state provided the following example of connecting their specific goals with HQIM work with the SEA’s broader vision for student success:

Ultimately, we want students to be ready for college and for life—that is our goal [of our SEA]. I don’t know that there’s agreement around how to get there. HQIM certainly supports that [goal].

### Spotlight Example of ‘Building Support from Allies’ in Arkansas

Early in its work with the IMPD Network, the Arkansas team dedicated time to developing common, shared understandings of HQIM and building support for the work across various levels of the state educational system. Through this process, the state team engaged staff and leaders across the SEA, RSCs, EPPs, LEAs, and in schools. As one leader explained,

We try to thread this work through more than one office, right? And so, in doing that, it helps to build collective commitment, collective accountability around the work. [We shared] the communication across the agency and outside of the agency, and everybody had a part.

In internal and external communications with stakeholders around HQIM, the team used consistent language and talking points rather than varying their messaging across groups. The consistency of messaging across time and across organizations with different stakeholders helped support the transparency and credibility of their HQIM work. One leader explained how consistent communications also lessened the need for stakeholders to navigate conflicting messaging:

What we did was make sure that people didn’t have to think about what the message was. We use the same slide deck, same materials across many different areas. I think we did a good job with that, and I think that the Network helped us do a really good job of that.

SEA leaders were confident that this early collation building would be beneficial to the sustainment of HQIM, because of the depth of shared understandings of the importance of HQIM and the extent to which they had integrated HQIM into school system structure and work. As one leader shared,

I think, we here in Arkansas, we will sustain this work. Number one, because we’ve tried to thread it through the fabric of our agency from federal programs to our learning unit, our licensure unit. We’ve invested a lot across a lot of systems. And we’ve outlined everybody’s role in that and our ecosystem of support. . . . This is not something we just talk about.

## Policy Area 2. Increase Local Education Agencies’ Selection and Use of HQIM by Signaling the Quality of Instructional Materials and Incentivizing Their Selection and Use

IMPD provided support to states in selecting contextually relevant strategies to increase the adoption and use of HQIM. These strategies ranged from legislation to incentives and supports to lower the barriers to adoption. We describe the strategies used by states to signal the quality of instructional materials, followed by strategies used to incentivize HQIM adoption.

To signal the quality of instructional materials, all IMPD states provided recommendations of specific HQIM or ratings of curricular materials that provided guidance on quality. Almost all (11 of 13) IMPD states provided a list of recommended instructional materials to districts, although just three states required districts to select from their state list. About half of the IMPD states (6 of 13) used EdReports’ Green curriculum ratings as a baseline indicator of quality.

Over three-quarters (9 of 13) of the IMPD states conducted a state-specific ratings process, which involved creating rubrics defining HQIM and methods to evaluate each curriculum according to state-specific standards and priorities, including panels of teachers in reviews and ratings. In some cases,

these state ratings were provided for multiple core subjects (e.g., ELA, mathematics). In contrast, in other cases, ratings solely addressed subjects not already reviewed by EdReports (e.g., social studies, world languages). The frequency of reviews also varied. Some states reviewed curricula on an annual basis, while others reviewed curricula only on the schedule of state standard renewal and when curricula were revised.

States were motivated to create these state-specific ratings processes in part because of the divergence of their state standards from Common Core standards (which form the foundation of EdReports ratings) and the priorities of local stakeholders. As one state team leader shared,

When it comes to signaling, the reason we wanted to do our own signaling system is not because there was pressure from the legislature, but because there was enough learning that had happened over the past decade or so that the gaps were evident of where we needed to close some gaps in order for materials to actually be meaningful to kids in the classroom. So over the last year, a big focus has been getting our signaling system lifted off. We wrote a framework that would underpin the entire signaling system.

States communicated state-specific ratings through specific websites geared toward transparent and open access to curricular ratings for district and school administrators, teachers, and parents. In a few states, state leaders noted that because their state standards closely aligned with the Common Core standards, they could leverage the EdReports ratings in constructing their state-specific ratings. See Figure 5.3 for a spotlight on New Mexico's approach to developing a process to review the quality of HQIM.

Reviewing curricula is a time- and labor-intensive process. In particular, a few coaches raised concerns about the sustainability of state-specific review processes, particularly given lean staffing in SEAs. In the words of one coach,

And so at first . . . in [state], they were thinking, "Should they do their own homegrown reports and reviews the kind of the way that Massachusetts does it, and Louisiana does it, where they actually bring together teachers locally to review all the materials, and that's how they determine what is quality?"

We were like, "That seems like a capacity drain and we're not going to do it well, and other people have done it already. So what's our strategy for signaling quality? Well, we're going to use EdReports, but we're going to brand it in [our state's] way."

## Spotlight on Signaling HQIM in New Mexico

On joining the IMPD Network, the New Mexico Public Education Department's HQIM team worked to strengthen its instructional material review process to ensure its rigor, relevance, and trustworthiness. The New Mexico team collaborated with teachers, superintendents, tribal leaders, and national experts to determine the SEA's role in signaling quality of instructional materials. In the words of one leader:

From the start, we knew that to raise the bar for instructional materials, we needed to update our regulations—both to strengthen our review process and to ensure that only truly high-quality materials made it onto our adopted list. Through our work with the IMPD Network, EdReports, other national experts, and local stakeholders, we have landed on a much stronger, more effective, and reliable materials review process for New Mexico.

In response, New Mexico created an annual Summer Review Institute that engaged experienced teachers in 30 hours of PL on the review process and its priorities, how to conduct unbiased reviews and how to apply review rubrics. These trained, experienced teachers then engaged in reviewing curricula using rubrics that assess alignment to state standards, design features of the materials (such as clarity, coherence, ease of use), integration of technology and data collection tools, and cultural responsiveness. These teacher ratings ultimately inform inclusion on the state's list of adopted instructional materials. These ratings form the foundation to further support district selection and adoption of HQIM. As one state leader shared,

Our main goal is to ensure every district has access to trusted resources—an excellent list of vetted materials and decisionmaking tools like review rubrics, structured literacy guides, supplemental material frameworks, and detailed team appraisals. At the heart of everything we develop is a commitment to doing what's right for kids—equipping districts to confidently adopt and implement high-quality instructional materials that truly support student learning.

Alongside strategies to signal the quality of instructional materials, states used differing approaches to incentivize districts' adoption of HQIM. Almost universally, states noted the limitations to their authority as a function of local control governance arrangements with districts. Just three states had legislation in place that mandated that districts use specific instructional materials, while almost half of IMPD states reported having some legislation that mandated adoption of HQIM in particular subjects and grade bands. One-quarter of the IMPD states used adoption of HQIM as part of their requirements or criteria for supports for chronically low-performing districts or schools. Almost all IMPD states incentivized the selection of HQIM by making adoption a condition of SEA supplemental grant funding to districts.

Sometimes I think of it as capital-P Policy for statutes and regulations, and then the lowercase-P policy. The closest we got to capital-P Policy is that when we got our ESSER [Elementary and Secondary School Emergency Relief] COVID[-19] Relief funds and were giving that to districts to purchase materials, we did require that they be an HQIM according to the reviews on ed reports. And then we do have some other capital-P policy that we've been able to. . . . We have a third grade reading law, and so we've been able to make the argument for better materials based on adherence to the requirements in that law. But most of ours is a little lowercase-P policy.

One-quarter of the IMPD states drew on accountability pressures to motivate adoption among districts. These SEAs asked all districts to report their adopted instructional materials. In one state,

voluntary reporting remained low, and the hoped-for benefits of this approach were not realized. However, in another state, collecting instructional materials data encouraged more districts to report the adoption of HQIM. Some states also sought to lower the barriers to HQIM adoption by providing HQIM free of charge for one or more subjects (4 of 13 states) or by providing streamlined procurement processes.

### **Policy Area 3. Increase the Number of Teachers Who Participate in HQPL Grounded in Skillful Use of HQIM**

Appropriate teacher training is crucial to the transition from HQIM adoption to skillful use. The IMPD specified that PL should be “content-specific,” preferably “specific to the curriculum the district is implementing,” “job-embedded,” and grounded in the skillful use of HQIM (CCSSO, undated-a). Several terms are used to describe this support (e.g., curriculum-based PL, high-quality professional development) and the terminology we use in this report (e.g., HQPL). A key role of SEAs is in providing opportunities for HQPL, through developing a strong marketplace for PL providers, limiting barriers for districts to access HQPL, and incentivizing the provision of HQPL (CCSSO, undated-a).

Although IMPD state team leaders endorsed HQPL and understood its unique features, they experienced challenges implementing this support at scale. IMPD states tended to use a combination of strategies for providing HQPL, such as providing grants to districts or RSCs to support HQPL, providing guidance for districts and RSCs to purchase and provide HQPL, and directly providing HQPL (or at least periodic curriculum-focused PL) to teachers or district administrators.

IMPD state team leads strongly expressed the importance of HQPL in supporting teachers to go from district adoption of HQIM to consistent, skillful use of HQIM in the classroom. In the words of one state team leader,

A lot of our schools have received that signal [around quality of materials] and they’ve purchased high-quality materials, but they’re perhaps either unable to or don’t see the importance of the implementation that’s needed and the type of implementation that’s needed—the intensity and frequency [of HQIM use] I think goes underserved.

State leads emphasized the differences between HQPL and more generic PL that is typically provided within districts (referred to as “very didactic” or “sit and get” by one interviewee) to teachers. As a state team lead shared,

It’s almost like we need to put it [HQPL] in the dictionary so that people aren’t confused—this is not just about any generic PL. This is really about the skillful use of curriculum-based materials that are of high quality. We’ve really homed in on building language around curriculum-based PL. I think that piece is really something that people are starting to catch on, but it’s a challenge to get it deeper embedded into the fabric of what we do here in [state].

State leaders also noted the importance of ongoing, job-embedded PL opportunities to support HQIM use. One state team leader characterized the importance of developing common understandings around this point as follows:

I think where we always still have to do more educating is in places like the legislature . . . Because I think sometimes there still is that perception, “Well, they’re teachers. Just give them the curriculum, they’ll be fine. They’ve been trained, right, as teachers.” But I’m like, “You don’t want your doctor learning how to do a tonsillectomy by just reading a book, right? You want him to get practice and support and supervision.” And that’s the same thing with our teachers. They need practice, they need support, they need supervision.

Although HQPL was routinely discussed as important to HQIM use by state leaders and IMPD coaches alike, states faced challenges in providing this kind of support. Several state leaders and coaches addressed the challenge of designing direct systems of HQPL support given the scale of work involved in providing intensive, ongoing, and frequent PL to large numbers of teachers in their states and the immense costs of staffing and resources.

Despite these challenges, almost all states focused on HQPL as a IMPD Roadmap policy area, across the study period. State strategies for providing HQPL at this large scale ranged from providing grants to districts or RSCs to support HQPL, to providing guidance for districts and RSCs to purchase and provide HQPL, and to directly providing HQPL to teachers or district administrators.

Almost all states (12 of 13) administered grants to their districts to support PL. In half of the states, these grants often included support for purchasing both HQIM and associated initial PL. For example, districts would receive a grant to purchase a new mathematics curriculum that meets HQIM criteria and the initial launch of PL services from the curriculum provider. This kind of one-time PL does not meet the criteria to be considered as HQPL because it is not ongoing and frequent. Three states also provided their districts with technical assistance in completing the grant proposals and selecting vendors and throughout the grant cycle. See the “Spotlight on Delaware’s Approach to Providing HQPL” box for more on that state’s approach to this policy area.

Eight states leveraged peer learning and accountability by connecting districts working on adopting and using HQIM in networks. In a few states, these districts were brought together in cohorts, intending to encourage districts to share learnings and support one another in adopting and using HQIM. As one coach shared,

For districts who have selected and are using HQIM in math or ELA, the state has a process for them to raise their hand for or apply to be a part of a cohort that is piloting, coaching, and align[ing] PL cycles [that are] centered around HQIM.

RSCs and analogous regional support organizations were important supporters of states’ HQPL plans in half of the IMPD states. IMPD state leads in seven states reported working with the RSCs to build their understanding of HQIM and their capacity to support districts directly in HQIM selection, adoption, and implementation. In three of these states, the SEA provided grants to RSCs that provide HQPL support to a set of local districts.

## Spotlight on Delaware's Approach to Providing HQPL

After achieving high HQIM adoption rates early on, Delaware focused its efforts around supporting strong HQIM implementation through strong HQPL. One leader described the challenging of moving from adoption to skillful use as follows:

Now that you've bought [HQIM,] now what? So it really is about skillful implementation, which is a much heavier lift, because it requires not only the understanding of the district personnel and staff, but also making sure that each and every teacher that's implementing has access to that kind of high quality professional learning and ongoing professional learning. That's not a one and done [professional development]. It's ongoing coaching, it's ongoing reflection and [professional learning communities] and all of that.

To address this complex undertaking, Delaware revamped its existing Reimagining Professional Learning (RPL) grant program to target HQIM implementation specifically. To receive an RPL grant, districts needed to submit a strong HQPL plan demonstrating alignment with HQIM. In addition to supporting early adopters, this grant program also incentivized HQIM adoption for those districts who hadn't yet adopted HQIM so that they could be eligible for this funding.

To support districts in developing and implementing strong HQPL plans, the SEA published expectations and provided districts with support and technical assistance. Once grants were awarded, grantees were connected with an SEA liaison for ongoing support throughout the grant period. Grantee districts also gained access to Delaware's vendor marketplace to connect with vetted HQPL providers.

The final step was to scale this program: RPL grew from \$400,000 per year to \$4 million per year distributed to districts for HQPL. As the program scaled, SEA leaders noted improvements in the quality of the plans: "The applications are better, districts are smarter about what they're asking for and these are really good [plans for] HQPL grounded in HQIM."

Almost three-quarters of the IMPD states published HQPL guides, curated vendor lists, or eased procurement procedures to help guide districts in their selection and provision of HQPL. Eight states published PL guides intended to help districts understand how HQPL differs from other supports or PL opportunities. As one state leader described,

[Our HQPL guide] basically is for the district on how they should look at materials, how they should adopt materials, and then how they should implement. So, there are eight elements to truly acquiring and implementing HQIM. So, it goes from the idea of HQIM to the implementation, and it's been really powerful.

As this state leader described, these HQPL guides sometimes fulfilled multiple purposes: providing guidance on how to provide HQPL opportunities while also helping build understanding and support for the adoption and use of HQIM.

Six states developed resources to help their districts select external providers of HQPL. This often included creating curated lists of vetted vendors to help guide district selection. As one state lead shared,

As far as PL, we annually update our PL marketplace list of vendors that support the HQIM that the state has endorsed. We're in the process of updating that. We've

recently created a HQIM implementation hub with resources and tools for districts to use to support their implementation in providing PL for their teachers.

Just two states supplemented vendor lists by lowering the barriers to engaging a HQPL support provider. For example, in one state, the SEA ran a request for proposals process for those support providers included on their vetted list to streamline the procurement process. In this way, districts that wish to engage one of the approved vendors can purchase HQPL through the existing contract rather than through their own request for proposals process. One coach described this as “a big bonus” because “it saves districts a lot of time.”

Although SEAs were generally not positioned with adequate capacity to provide comprehensive PL to all teachers in their state, some states did develop systems to provide HQPL to a subset of school-level staff (5 of 13 states). Four states leveraged coaching models, drawing on existing literacy or leadership coaches, to help support teachers and principals. In addition, the majority of IMPD states also provided some direct support to district administrators around HQIM adoption and implementation. These ranged from including PL on HQIM in regular convenings, providing formal support through grant programs, and providing informal, one-on-one support to district leaders.

#### **Policy Area 4. Increase the Number of EPPs That Prepare New Educators to Identify and Skillfully Use HQIM**

The IMPD Roadmap includes attention not only to the on-the-job training in curricular use but also to the ways in which EPPs help acculturate teachers to the principle of skillfully using HQIM. SEA teams in the IMPD Network sought to encourage EPPs to provide preservice educators with an understanding of HQIM and the knowledge and skills to use high-quality curricula with adaptations to local context through coursework and clinical experiences. IMPD states did so through formal policy changes and building common understanding and support for HQIM with EPPs. Strategies included communicating the role of SEAs and EPPs in supporting HQIM, convening networks of EPPs to integrate skillful use of HQIM into coursework, and using program approval as a lever for improved adoption and use.

Shifting the focus of EPP support toward skillful use of HQIM was challenging for SEAs. The major focus of IMPD work with EPPs was changing key principles around instruction. Before the emphasis on skillfully using HQIM, many EPP faculty focused on building prospective teachers’ ability to develop and create new lessons by backward mapping to the state standards. This shift represented a fundamental change in how teachers (and EPP faculty) think about their roles and how they should structure instruction. In the words of one state team leader,

EPPs are [like] turning the Titanic. I mean, it’s like they’re stuck in, “need to know how to build a solid unit with solid lesson plans” . . . So, I think it’s just getting them to understand that this is not the Ed Prep programs we grew up with. This needs to look different. . . . And it’s a hard sell right now.

States varied in the extent to which SEAs have authority over program review and teacher licensure. Even where states do have some authority, the culture of autonomy for university faculty can present challenges to influencing course content.

I think probably that for us the next step that we probably do need to focus on is how do we partner with [EPPs] around that. Professors are often operating like independent contractors in a way, and so I think that . . . getting that alignment and getting people on the same page there is going to take work and I'm not sure from my vantage point that we've gotten that far.

More than half of the IMPD state teams noted challenges in making progress in this IMPD Roadmap policy area because of limited influence and authority.

The [Roadmap policy areas] we've been able to control ourselves, around reviewing instructional materials for their quality, providing those tools, those sorts of things [have been easier]. We even revised regulation, right? So we kind of did all these formal things. We're not in control or able to affect those things easily like Ed Prep. That's going to take a lot of work and communication and collaboration.

IMPD state teams leveraged program approval and educator licensure requirements to incentivize HQIM focus. Five states used program review and approval as a lever to increase EPP focus on HQIM. These states built HQIM into program requirements for EPPs, such as requiring program graduates to demonstrate curriculum literacy. A few states made policy changes in their teacher licensure requirements, asking teacher candidates to demonstrate experience with HQIM to receive their licenses. Furthermore, in five states, collaboration with EPPs was specifically mentioned in HQIM legislation. For example, one state's statute explicitly includes "how to implement effective literacy instruction using high-quality instructional materials" as a requirement for teacher certification and teacher education programs in their state. A few states also sought to align educator effectiveness (e.g., teacher performance evaluation) standards to the principle of skillful use of HQIM (instead of, for example, designing lessons by backward-mapping from the standards). EPPs often refer to these educator effectiveness standards for guidance on program design.

Almost all IMPD state teams (11 of 13) sought to engage and provide support to EPPs regarding HQIM. These SEA teams reached out to EPP faculty and staff to present the evidence base for using HQIM and discuss how the principles of HQIM use might be integrated into their programs. Several states (6 of 13) facilitated learning groups with EPP staff, such as advisory groups (4 of 13) or pilot cohorts of EPPs (2 of 13). A few states used these partnerships to develop model syllabi on which other preparation programs might style their HQIM coursework. To support these partnerships, some states worked to ensure access to HQIM for faculty and students (2 of 13), established grants for EPPs to support incorporating HQIM principles (2 of 13), and surveyed EPPs to gauge their use of HQIM (1 of 13). See the "Spotlight on Massachusetts' Approach to Working with EPPs" box for more on that state's approach.

Efforts to strengthen EPP collaboration required substantial work within the SEA. Eight state teams noted that they lacked the appropriate staffing to progress their EPP work alongside other IMPD Roadmap work. For example, changes to policy around EPP that were associated with program review or licensure also required that SEA staff monitor policy compliance. One state lead reported, "We're officially very transparently parking-lotting the EPP work until we're able to move all this other stuff." State teams also reported that progressing EPP work required internal realignment and engagement, as the staff who manage EPP renewal or licensure are not situated in the same department as those working on curriculum and instructional materials. In some states, it took time to

develop these connections across the department and establish common understanding and support for HQIM-related work in EPPs. In one state, a lead noted that the department responsible for EPPs is focused on only legislatively mandated activities, making it challenging to prioritize HQIM-related efforts. In five states, team leaders noted that they experienced challenges in helping EPPs to manage on which curriculum they should focus their HQIM preparation, given the different districts where their graduates went on to work. In some cases, state teams noted that this led to resistance from EPP faculty. As one state leader shared,

We've experienced resistance [with EPPs asking], "Just how are they preparing teachers to go into the field and use instructional materials when there's so many possibilities?" So they [EPP faculty] feel overwhelmed. We are trying to engage with them more, especially as they build out their methods courses. And are we at least introducing the idea of curriculum literacy, or are we still doing old school? "One of your big assignments this semester is writing a unit and writing a lesson within that unit." We are trying to get them away from that practice, but it's hard.

### **Spotlight on Massachusetts' Approach to Working with EPPs**

The Massachusetts SEA acknowledged the importance of ensuring that new teachers were well-versed in and understand the principle of skillful use of HQIM. The SEA took a multi-pronged approach, integrating HQIM expectations for educators across their career cycles.

Specifically, the Massachusetts SEA worked with EPP to ensure that new teachers arrive in classrooms ready to skillfully implement HQIM. The SEA updated guidelines and review process for EPPs, adding curriculum literacy as a key competency that teacher candidates should demonstrate. The updated guidance also requires EPPs to facilitate practical field experiences that would allow preservice teachers to practice using HQIM in the classroom.

To expand these expectations throughout a teacher's career, the Massachusetts SEA team updated evaluation frameworks for teachers and administrators to include key curriculum literacy skills and hold educators at all levels accountable for strong HQIM implementation. One leader described this integration of the Curriculum Matters initiative: "We're saying, the systems and structures [for HQIM], you own that. How do you building a culture, practices, and mindset to support your educators?"

## **Policy Area 5. Collect and Analyze Data to Support Continuous Improvement and Understand Outcomes**

The most cross-cutting IMPD Roadmap policy area concerns states' data collection and analysis. This policy area was intended to ensure that states collect relevant data on HQIM selection, adoption, use, and the provision of supports through EPPs and HQPL. SEAs are expected to use these data to monitor implementation and identify opportunities for continuous improvement of their efforts related to HQIM. Overall, most IMPD states collected information on HQIM adoption, while data on HQPL was somewhat less common (just 4 of 13 states), and EPP data were rare (2 of 13). Part of their work on this IMPD Roadmap policy area also involved states aligning their existing data (such as

student achievement data) to the goals of monitoring HQIM adoption and use. Key challenges across states concerned the level of data collection (e.g., district versus school versus classroom) and the use of data for decisionmaking.

Almost half of the IMPD states shared that before their work on data collection, their states lacked strong, coherent, and unified data collection and management systems regarding instructional materials. As one coach explained, IMPD efforts presented an opportunity for states to develop more streamlined, coherent data collection efforts:

[State is] a state that has, until recently, had a real problem with the way they collected data. On the technology side, they were collecting a lot of information on paper and then someone was having to do data entry. There was a lot of duplicative data that was being collected across the agency from districts. So they've really been working to streamline as much as possible. In fact, I think it was last year the governor asked that they reduce the amount of information they were requesting, data and reports from districts by a significant amount . . . So I think they've really been working to streamline the approach, but also to get smarter about what data they're collecting, why they need [them] and how they use [them].

Specifically, to address this challenge and gather data on district adoption of HQIM, states used information from mandatory reporting of adopted curricula (5 of 13 states), voluntary reporting of adopted curricula (7 of 13), and data about instructional materials purchases gathered from procurement systems (6 of 13). A few state teams noted challenges, even in these activities, such as low response rates to voluntary surveys (3 of 13). A few states supplemented these data with information gathered from RSCs about the curricula adopted locally (3 of 13 states). See the “Spotlight on Tennessee’s Approach to Data Collection and Monitoring” box for a spotlight on that state’s approach.

As part of their participation in IMPD, all states also received state-specific AIRS data on adoption and use of instructional materials by teachers, along with personalized meetings with RAND researchers to discuss these data and how they compare with the national samples. These data formed the backbone of some of the SEA progress-monitoring activities. State leaders reported that AIRS data were particularly valuable in understanding patterns in HQIM adoption in use, such as whether progress had seen greater adoption in mathematics or literacy, how adoption and use improved over time, and what rationale teachers gave for not using HQIM. Although AIRS data provided useful overarching patterns, these data were collected from just a sample of teachers, so they were less helpful in monitoring school or classroom-level HQIM adoption and use across the whole state.

Several states (6 of 13) developed public or semipublic adoption dashboards that display district-level adoption decisions. State team leads reported different aims with these dashboards. Some states hoped that dashboards would encourage peer accountability, because districts might be motivated to adopt HQIM once they saw that their peer districts used those materials. Relatedly, a few states reported that they felt that the transparency of the dashboard also helped districts to find and connect with districts already using a curriculum they are interested in adopting, for advice and information. Interestingly, one state team lead also shared that completion of voluntary reporting on dashboards served as a form of data itself. This state team measured completion of the reporting survey as a form of participation and then examined the rates of HQIM adoption. In this state team leader’s words,

We've been tracking [HQIM adoptions] through the dashboard that I mentioned earlier. But we don't have a policy mechanism that requires districts to tell us what they've adopted. So, we have to rely on their willingness to complete that survey. So, it's a little tricky to sort of track, because we're getting higher participation rates, which to us means that's a positive that they're willing to even complete the survey. They see value in HQIM and the work that's happening across the state. So, we're kind of measuring their participation as that increase in the survey itself. But then also, tracking the adoption rate that we see.

### Spotlight on Tennessee's Approach to Data Collection and Monitoring

Tennessee developed its data collection strategy and structures early on in its HQIM journey, because it developed strategies to support HQIM adoption and HQPL provision. The Tennessee SEA team knew from the beginning that information on classroom practices would be essential for determining whether HQIM policies were working—success, in the team's eyes, would mean improvements in classroom practices. As one SEA leader shared,

I think all of the starter points are there, the materials have been selected. Right? The framework for implementation is there, the data collection is there. We have everything in place. It's now, how do we actually make sure that we're seeing the through line to student outcomes?

To draw this line through to student outcomes, the SEA worked to develop several forms of data collection into its technical assistance and HQPL. As part of its support to districts on HQIM selection, adoption, and implementation, Tennessee's SEA provides funding for technical assistance and HQPL for district and school staff through vendors, regional core offices, and implementation networks. These contracts were structured with stipulations to ensure useful data collection and sharing. An IMPD staff member described this approach:

They've been really smart in the way they constructed vendor agreements and grants. they get a bunch of this data through the vendors who are running their implementation networks and through the vendors who are providing professional learning to district leaders and school leaders and teachers and through their core offices.

To help structure data collection, Tennessee adopted an Instructional Practice Guide—a classroom observation tool—to ensure consistent observation data on classroom instruction using a common rubric. All vendors used the Instructional Practice Guide to gather and share classroom-level data with the Tennessee SEA at the beginning, middle, and end of each school year. By asking vendors and partners to collect this data, the SEA helped create a lower stakes environment to collect data at the classroom level, because local staff were less concerned about observation data being used punitively. As an IMPD staff member explained: “The data collection was from vendors, who were also trusted partners and support providers. . . .They worked intentionally to make sure there wasn't a culture of fear about th[ese] data.”

States used creative means to collect these data along with existing procedures. For example, one state team leader explained how they integrated information on instructional materials adoption into existing reporting on district strategic plans:

We collect every school system's strategic plan that aligns to our state strategy. And so they have to submit all of this data in there: they'll say which HQIM they're using,

which vendor they're using for the PL, how much money they're paying on it, which schools. So we have that [data]. The problem is that is the only point in time where we collect that and so many things change after they submit that. It's not the best indicator of usage or implementation. It would be really nice if there was a six months later version where they had to update or accurately reflect what they were really doing.

As this state leader shared, there were limitations to the usefulness of these data because of the timing, content, and level. Annually collected data provided few opportunities to examine real-time changes and test whether their efforts were successful or needed adjustment. Furthermore, data that focused on adoption, particularly when collected at the district level, provided limited insights into whether and how HQIM are used in schools and classrooms.

A major need of states was comprehensive, accurate data on the use of instructional materials in schools. As one state leader explained, this information was crucial to understand the connection between observed rates of HQIM adoption and how this showed up in student achievement data. In this state leader's words,

So we have been collecting data on adoption, right? "I adopted this curriculum," which is very easy and straightforward. Now, we're trying to get to the point of, so what can we say about implementation? And while we know we can never get to the depth that anyone would like to around where are we with implementation, that's ultimately the question. When we go and talk to our council, [they say:] "Great. Now everyone's using HQIM, how come our results haven't moved yet? What is this going to now take to see the numbers start to increase?" And so then we talk about implementation, but it's really hard to be able to share information other than anecdotal information on that.

SEAs generally do not have adequate staffing to collect observation data directly at the classroom level across their state. About half of the IMPD states partnered with support providers and research organizations to help develop data collection on school and classroom use of HQIM. One strategy was to create statewide common observation tools, encouraging principals, district administrators, HQPL providers, or RSCs to gather common information about instructional materials use. These observational tools were not only intended to provide information about HQIM use but also were thought to provide opportunities to shift perspectives on how instructional materials should be used and the value of HQIM among RSCs, principals, and district administrators. As one state team leader described,

We're requiring our [educational service units] to use that as a classroom walkthrough tool . . . And we're hoping that that is a change in practice that building leaders who are providing coaching and feedback to teachers are doing it in a way that honors what we know about materials, what we know about instruction. I think our [RSC] folks are changing their practice. They're thinking about how they deliver their services, they're expanding their definition of what they provide to include HQPD.

At the time of this study, just one state had developed data-sharing agreements to ensure that observation data collected by contractors and across districts could be made accessible to the SEA and used to monitor HQIM use.

## Perspectives from Non-IMPD SEA Leaders on Their Approach to Instructional Materials Work and Challenges in Implementation

To understand how IMPD states might differ from non-IMPD states in terms of their use of strategies to support take-up of HQIM, we conducted interviews with a small sample of non-IMPD SEA leaders (i.e., CAOs or similar). We reached out to all non-IMPD states and interviewed respondents from six states. It is possible that this sample may be biased (e.g., states more engaged in HQIM-related reforms may have been more willing to discuss instructional materials).

### Non-IMPD Respondents Implemented Some Similar HQIM-Related Strategies as IMPD States, But at a More Limited Scale

We observed that non-IMPD states use similar policies, strategies, and approaches around instructional materials as IMPD states. However, non-IMPD states typically addressed just one IMPD Roadmap policy area, often with less intensity than that of IMPD states. For example, although SEA leaders worked within their departments to revise curricular review processes, this was rarely tied to training, vetting of support providers, and efforts to align SEA messaging around instructional materials use. One non-IMPD state leader expressed this tension as they sought to offer districts with more HQIM-related PL opportunities:

The piece that I'm trying to add [HQPL], I'm not saying I'm there yet because my folks within the agency are fighting me on it. [They say,] "We don't provide curriculum, so how do we have that professional development?"

All interviewees shared that their SEA's vision for instructional materials involved the use of materials aligned to state standards. Although four of the six non-IMPD state leaders reported having HQIM specifically as a priority for their state, two states reported a more hands-off approach and acknowledged that the selection of materials was firmly within the purview of districts. Nonetheless, one state leader identified the challenges of this "agnostic" approach to instructional materials:

My standards folks . . . have thought that they were supposed to be curriculum agnostic and that they were not supposed to evaluate the quality of curriculum and instructional materials. Their job was to develop standards . . . [and] that's kind of where their job ended. And then some of that I think is philosophically from the approach that if I have high-quality teachers, each teacher is supposed to independently curate their own curriculum and only the individual teacher at the classroom level can know the group of kids in their room and their specific needs. But I think when we look at our results nationally, but also in [our state], that approach hasn't worked.

More than one-half of non-IMPD respondents similarly attributed an increased focus to HQIM use to observed poor academic performance over time.

Similar to IMPD Network states, non-IMPD Network state leaders reported being motivated or supported in HQIM adoption and use by state legislation as well as a growing movement around the Science of Reading. Furthermore, four respondents noted that they currently had curriculum review

processes and generated lists of recommended curricula. Still, most of these respondents also noted that these processes required revision to be more rigorous in identifying HQIM.

If we're going to start talking about this, we better be darn sure that our state list is something we're proud of. . . . And we don't feel bad about it, but don't feel great about it. So one of the things that I met with the team today about is when we're putting together a state list, how do we know for sure that the list we're creating is something we can all stand behind and that it's strong and robust and thorough. We've got to really get our own house in order before we're asking districts to do that, because it's going to really matter because people are going to be scrutinizing our list.

Constrained financial resources also played a role in the ability of SEAs to move forward with HQIM work. For example, the materials review process can be costly given the necessity of well-versed reviewers to look through voluminous instructional materials. One state leader noted that they addressed this issue by requiring curriculum publishers to pay a fee to cover review, while another leader reported that their state made use of unpaid volunteer reviewers. A few states noted additional strategies were in the process of development, such as asking districts to report their selected curricula, creating programs to recognize districts that select HQIM, and using school improvement requirements to incentivize HQIM adoption and use.

At the time of these interviews, the non-IMPD state leaders expressed that they wanted to provide better support to districts for using HQIM but had not yet realized this goal. As one non-IMPD state leader shared,

How do we support the implementation? I think the state's always had a lot of conversations about selection and making sure the process worked, but we kind of dropped the ball once we got the implementation because that was not seen as the purview of the state. That was more within the purview of the district. So we are not going to do that this time.

A few states did note that they had put together toolkits or other guidance materials to help districts make their HQIM and HQPL decisions; two also noted collaborating with their RSC to support HQIM work.

Motivated by observed gaps in new teachers' understanding of literacy instruction, in particular, a few non-IMPD respondents shared that their states had begun in-depth discussions with their local EPPs to develop shared understandings of these gaps, co-develop support programs for some teacher candidates, and revise program requirements.

Despite using a similar array of HQIM strategies, non-IMPD states differed in their work from IMPD states in several ways. First, almost all non-IMPD states were more focused on the earlier steps in the IMPD Roadmap (e.g., signaling quality and incentivizing adoption of HQIM) than supporting skillful use of HQIM in the classroom. Second, these non-IMPD states differed from IMPD states in the cohesiveness, integration, and prioritization of HQIM work within their SEAs. For example, non-IMPD states may have made inroads on specific areas (e.g., signaling quality) but did not exhibit strong connections from adoption to PL, rarely describing a full-scale strategic plan that connected their HQIM work that was evident in most IMPD states. Relatedly, non-IMPD states more often described challenges in gaining SEA prioritization of HQIM and support for HQIM work across

departments. Non-IMPD respondents rarely described supplemental grant programs or work with vendors to support HQIM work, contrasting sharply with IMPD respondents.

## Non-IMPD States Faced Common Organizational Capacity Constraints to HQIM Work

Although all non-IMPD respondents noted high levels of local control in their states, three-quarters of the respondents also described the SEA as having limited credibility and authority over instructional materials decisions, from the districts' perspective. For example, even though they had put together approved curricula lists in one state, one non-IMPD state leader noted that most districts did not know this list existed. Another state leader noted that, historically, districts treated SEA requests as compliance activities, which limited the uptake of their HQIM advocacy.

Similar to IMPD respondents, most non-IMPD respondents noted that limited staffing constrained their ability to move forward with HQIM work. Four respondents reported that their SEAs had small departments responsible for instructional materials, which constrained their ability to engage in multiple IMPD Roadmap areas concurrently or to manage larger-scale tasks, such as curriculum review or PL support. As one leader shared,

Our internal capacity and infrastructure for leading for HQIM . . . we don't have a lot of capacity internally. . . . One of the things I have heard . . . is from the districts saying, this process takes so long. Or we have the state superintendents that are like, is there any way we can speed this up? And so I was thinking about it. We could, if we had project facilitators, project managers running this, two of them, and they could keep that cycle going. All their focus would be, and then our subject-matter experts, we'll be part of the process, but they can get on with their PL, their trainings, building out resources to support using data, doing some research, all these things that fall off the plate.

Three non-IMPD respondents also noted that their staff did not possess the necessary skills or knowledge to lead HQIM work. For example, one leader shared that their staff were often content experts but not experts in leading and managing policy implementation. This leader said, "They were very good science folks, but that doesn't mean you know how to lead a team of science folks." Another leader noted that staff were well-versed in the literature and understanding of other states' policy approaches. Still, they did not know how to bridge the gap to classrooms and help teachers understand "how you actually are in a classroom and what's the best instructional approach to use." Across these states, common concerns arose about having limited staff capacity to engage in strategic planning and project management.

Half of the non-IMPD respondents described mindsets around the role of the SEA as a barrier to their work. These SEA leaders describe the move toward HQIM as both a shift in the mindset around how instructional materials should be used and what the state's role should be in supporting instruction. One leader described, "One challenge is absolutely the mindset around it being bad to teach from the book—it's like if you are a good teacher, you don't teach from the book." Within the SEA, one leader described how their staff had entrenched beliefs about their role as "curriculum

agnostic,” making the shift to evaluating instructional material quality challenging. Echoing these concerns, a non-IMPD SEA leader summarized,

How do we transition the SEA to say, “This is the standard for what instructional materials should be in the state?” and how do we guarantee and provide a minimally adequate standard curriculum? That’s going to require some people to give up teacher autonomy . . . because what they’re providing, quite frankly is just not good enough for kids in classrooms. And so that’s been a mind shift issue here at the SEA, but also at districts and in schools because you have to gently nudge them toward . . . We’ve got to have strong tier one. We can’t keep remediating our way and expecting kids to catch up or really to achieve anything.

## Reviewing HQIM Policy Across the Nation

Earlier in this chapter, we presented reports from IMPD state leaders and a small sample of non-IMPD state leaders on the development and presence of HQIM policy in their states. To better understand the differences in state policy on HQIM within and outside the IMPD Network, we also conducted a policy scan of all 50 states and the District of Columbia to better understand the HQIM policy environment within and outside IMPD Network states. Specifically, for each state, we reviewed publicly available statutes, legislation, regulations, policy documents, and guidance documents and identified the extent to which each area had active policies or guidance, as of April 2024, in several policy areas related to instructional materials, PL, and educator preparation.

### HQIM Policies in Policy Scan

We list the 11 policies we reviewed as part of this policy scan, and there is further description of each policy listed in Appendix B:

- Instructional materials (IM)
  - State recommends or rates materials (IM1)
  - State collects data from districts on adoption of materials (IM2)
  - State provides guidance on selection of materials (IM3)
  - State requires districts to use approved materials (IM4)
  - State provides funding for adoption of approved materials (IM5)
  - State provides district with negotiated prices for materials (IM6)
- Professional learning (PL)
  - State includes alignment to instructional materials in definition of high-quality PL (PL1)
  - State recommends or rates providers of high-quality PL (PL2)
  - State directly provides high-quality PL (PL3)
  - State provides funds for high-quality PL (PL4)
- Educator preparation (EP)
  - State includes using or selection instructional materials in preparation program requirements (EP1)

We coded each state using both state-specific sources (e.g., websites, statutes) of information and pre-existing coding of HQIM policy provided by the Collaborative for Student Success

(CurriculumHQ, undated), Education Commission of the States (Whinnery, Silva-Padron, and Bloomquist, 2022), State Educational Technology Directors Association (undated), and the Reading League in the creation of our codes (The Reading League, undated). Each state was coded independently by two to four coders, and coders met to review and reconcile any discrepancies across coders to produce a final set of codes. For the purposes of our analysis in this report, the presence of each HQIM policy is coded using dichotomous (i.e., “yes” or “no”) indicators. Additionally, we generated two versions of each code: a general coding that pertains to policies governing instructional and PL more broadly, and a Science of Reading coding that pertains to policies that govern only instructional and PL as it relates to early grades reading and literacy.

Our decision to code states dichotomously on each policy simplifies the analysis and presentation of the policy scan data, but at the cost of presenting the substantial policy variation that may exist across states that were dichotomously coded as “yes” for a given policy. For example, states guide districts on instructional material selection (Code IM3) with varying levels of intensity—from providing links to external resources on state department of education websites to developing state-specific adoption rubrics for district use. We provide further description of each code in Appendix B on the specific policy areas needed to code a state with a given a policy and state-specific codes for each policy.

The policy scan is a useful tool to examine variation in HQIM policy across all 50 states and the District of Columbia and, in Chapter 7, associations between the presence of various HQIM policies and teacher use of HQIM and participation in HQPL. However, we note several limitations with these data.

First, publicly available documents may not provide full details on the design and implementation of various HQIM policies. This issue is exacerbated in states outside the IMPD Network that are not actively promoting the use and adoption of new instructional materials. We recognize that states may potentially have active HQIM policies that are not publicly documented or readily accessible on public sites. Additionally, we could not verify our state coding in this analysis with all 50 states and the District of Columbia. In many instances, the most recently available documentation for many states was several years old, meaning the policies described may be outdated or superseded. Relatedly, the presence of public documentation of policies does not mean that they are being implemented as described. In general, we note that the information on policy design and implementation captured in the policy scan will generally be more limited than the information captured through interviews with state leaders.

A second, related issue is that the list of policies included in the policy scan analysis is informed by, but not identical to, the five IMPD Roadmap policy areas listed at the beginning of this chapter that organize our analysis of state leader interviews. We made these modifications because of the need to generate single-barreled codes that allowed for coders to easily verify using publicly available documentation.<sup>4</sup> Additionally, we were not able to consistently find documentation related to strategies that were not directly linked to specific policies (e.g., coalition building, allyship) and do not attempt to code these strategies as part of the policy scan.

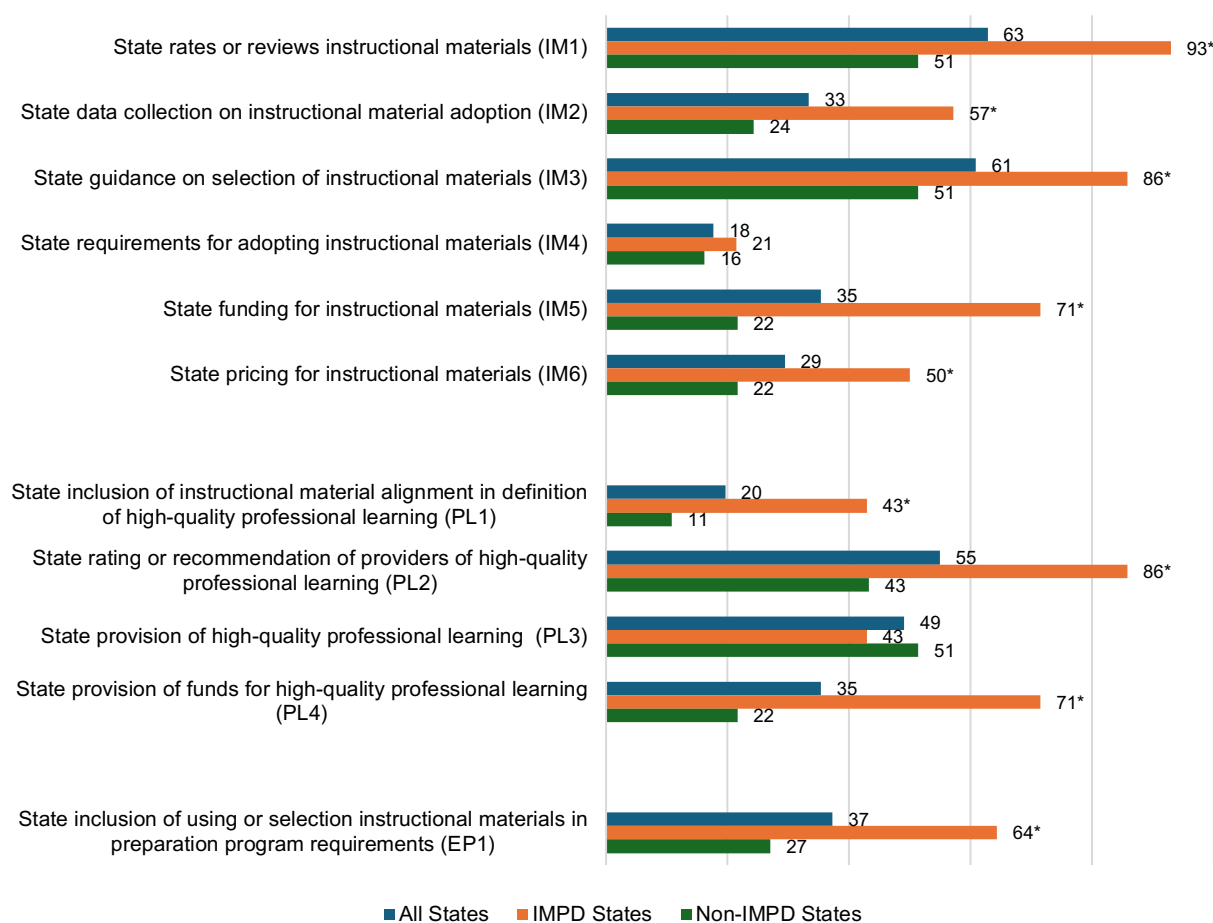
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<sup>4</sup> For example, we modified Policy Area 2 of the IMPD Roadmap, “Increase LEAs’ selection and use of HQIM by signaling the quality of instructional materials and incentivizing their selection use,” to five separate codes (IM1, IM3, IM4, IM5, IM6) to have single-barreled codes.

## As of April 2024, States in the IMPD Network Were Broadly More Likely to Have HQIM-Related Policies in Place Than Non-IMPD States

In Figures 5.2 and 5.3, we show the percentage of states, overall and by IMPD Network membership, where each of the 11 policy scan policies was present or completed (as of April 2024). Figure 5.2 shows the prevalence of general HQIM policies that apply to all subjects and grades, and Figure 5.3 shows the prevalence of Science of Reading HQIM policies that apply only to reading and ELA instruction in the elementary grades.

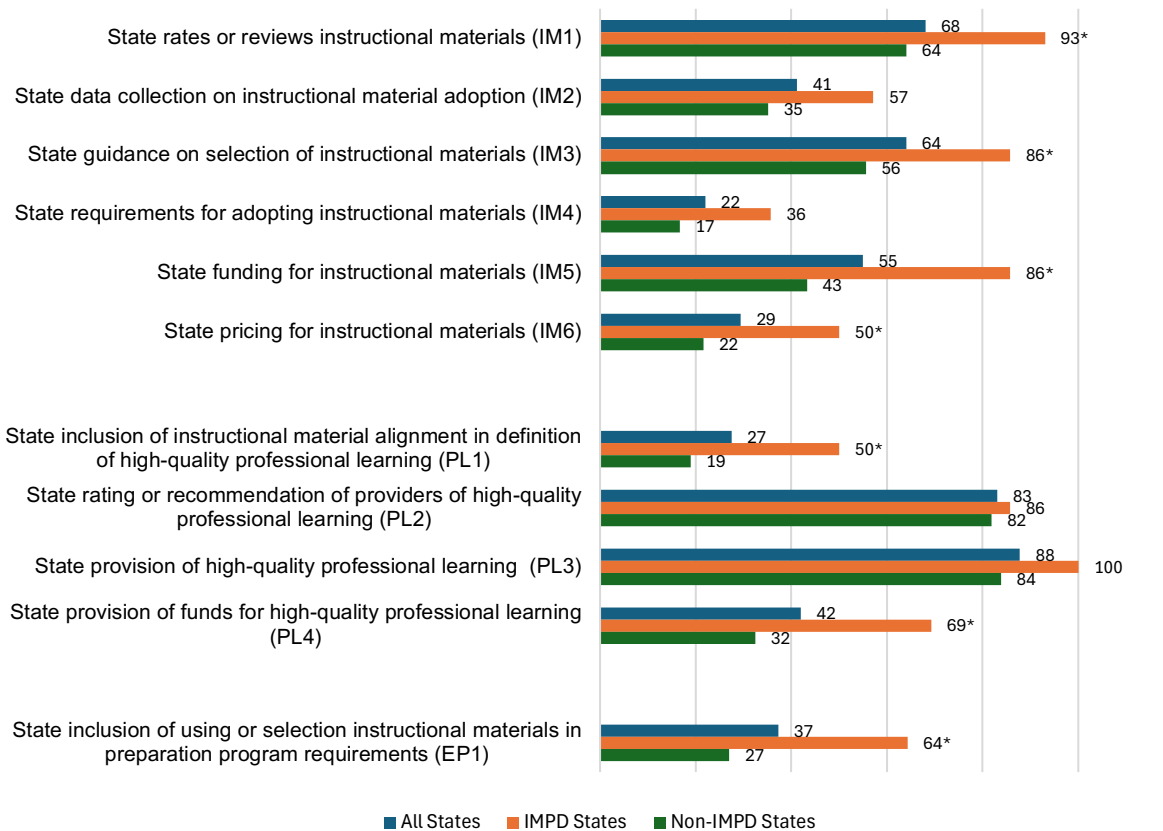
**Figure 5.2. Prevalence of General HQIM Policies for all Grades and Subjects (Percentage of States)**



NOTE: This figure presents the percentage of states and Washington, D.C., where a particular HQIM policy was present or complete as of April 2024. Percentages are presented for all states and the District of Columbia, IMPD states as of April 2024, and non-IMPD states as of April 2024. The term *General HQIM Policy* refers to the presence of policies that apply to all grades and subjects. An asterisk (\*) indicates that the percentage of IMPD states with that policy significantly differed from the percentage of non-IMPD states with that policy at the  $p < 0.05$  level.

These data offer several interesting findings. First, while six in ten states support districts in selecting instructional materials in the form of ratings or reviews (IM1) or guidance (IM3), few states (18 percent) require districts to adopt specific instructional materials. Second, states within the IMPD Network were more likely to have these policies present than states outside the network. In most areas, IMPD states were between 30 and 50 percentage points more likely to have adopted a particular policy than non-IMPD states, with the largest discrepancies being in the areas of state funding for instructional materials (IM5) and PL (PL4), where IMPD states were 50 percentage points more likely to provide funding than non-IMPD states. Third, states were generally more likely to have policies related to the selection and implementation of instructional materials and PL in elementary reading and literacy (i.e., Science of Reading policies) than in other subjects and grades. These differences were most stark when it comes to policies related to PL—whereas only roughly half of states either rate or recommend curriculum-based or standards-based PL providers or provided these PL opportunities themselves across all grades and subjects, over 80 percent of states did so specific to PL related to promoting the Science of Reading. Importantly, the gap in the presence of HQIM policy between IMPD and non-IMPD states was less pronounced when focusing specifically on elementary reading and literacy.

**Figure 5.3. Prevalence of Science of Reading HQIM Policies for Elementary Reading and ELA  
(Percentage of States)**



NOTE: This figure presents the percentage of states and Washington, D.C., where a particular HQIM policy was present or complete as of April 2024. Percentages are presented for all states and the District of Columbia, IMPD states as of April 2024, and non-IMPD states as of April 2024. The term *Science of Reading HQIM Policies* refers to the presence of policies that apply only to instructional materials, PL, and educator preparation for teaching elementary reading and literacy. An asterisk (\*) indicates that the percentage of IMPD states with that policy significantly differed from the percentage of non-IMPD states with that policy at the  $p < 0.05$  level.

# **Understanding District Instructional Materials Selection and Support and Comparing Teacher Use of HQIM and Participation in HQPL in IMPD and Non-IMPD States**

In this chapter, we explore how these state-level activities feed into how district administrators understand the importance of instructional materials, how they structure their materials selection process and supports, and the extent to which teachers report using HQIM and participating in HQPL. We also present findings related to RQ 4: To what extent are IMPD membership and state HQIM policies associated with (1) district processes for selecting instructional materials and PL opportunities and (2) teacher use of HQIM and participation in HQPL? These findings are based on analysis of district leader interviews, which provide insight into district processes for selecting instructional materials and PL and whether state policies inform these processes, and analysis of teacher-reported use of standards-aligned instructional materials and participation in curriculum-focused PL from the AIRS.

#### **RQ 4. To What Extent Are IMPD Membership and State HQIM Policies Associated with (1) District Processes for IM and PL Opportunities and (2) Teacher Use of HQIM and Participation in HQPL?**

##### **Key Findings**

- Most district administrators cited consistent use of instructional materials as a core component of their instructional vision; understandings of skillful use were more mixed.
- District processes for selecting materials were complex and involved buy-in and approval from district administrators, teachers, and often parents.
- District administrators commonly mentioned specific state policy, supports, or guidance as informing their decisions but infrequently communicated with state officials regarding HQIM work.
- In any given year, teachers in IMPD Network states are 5 to 10 percentage points more likely to use an ELA HQIM. Usage of math HQIM is comparable between IMPD and non-IMPD Network states.
- Teacher participation in frequent HQPL is similar between IMPD and non-IMPD Network states; differences between these groups were typically smaller than 5 percentage points.
- We found suggestive evidence that, among states joining the IMPD Network since 2019, states saw increases in HQIM use relative to before they joined the IMPD Network.
- We did not find evidence of increases in teacher participation in HQPL in states relative to before states joined the IMPD Network.

## **District Administrator Perspectives on Adopting and Using HQIM**

We explore how interviewed district administrators understand the importance of instructional materials and reported selecting, adopting, and using instructional materials. In total, we interviewed 63 district administrators (50 in 13 IMPD states, 13 in 11 non-IMPD states). We asked district administrators about their vision for instructional materials use, their process for selecting and adopting instructional materials, the supports that they provided to teachers and school leaders, their ways of monitoring use, and the constraints and enablers to this work. Because we spoke with district administrators in both IMPD and non-IMPD states with different mechanisms to incentivize HQIM adoption, we asked about their philosophy around instructional materials adoption and use generally, rather than specifically about HQIM. In this work, we also examined how these districts interacted with SEAs and state policies around HQIM.

### **Most District Administrators Cited Consistent Use of Instructional Materials as a Core Component of Their Instructional Vision**

Most district administrators we interviewed reported that their vision for instruction included consistent use of instructional materials, and there were opportunities for teachers to tailor the pacing and delivery of instruction to suit student needs. For example, one district administrator described the importance of HQIM that are vetted and strongly aligned with standards, noting that “experienced teachers are the key lever alongside that to helping students grow.” Another district administrator in an IMPD state shared that they are “able to take curriculum and elevate it far beyond what a publisher

does, but [our curriculum] is a foundational piece that ensures equity and opportunity for all students.” Similarly, another district administrator emphasized the importance of both HQIM and teacher expertise, saying,

We want them to be able to take the materials that they have, the curriculum resources that they have, look at their student data and make sure that they are working toward whatever the standard may be, teaching that standard and doing some differentiation or reteaching based on the student outcomes. So we really want our teachers to be very intentional and strategic in what they are doing with the curriculum materials in hope that it aligns with the student data and their needs.

Despite this vision for curriculum use, some district administrators described challenges in conveying this expectation to teachers. One district leader described this challenge, noting that consistent implementation of the curriculum was “a new expectation” that required “some really tough conversations.” Another district administrator described this challenge in terms of balancing teacher autonomy and strong instructional materials use:

I think we’re still wrestling with that because autonomy is important, but so is our ability to guarantee high-quality resources across the board for kids and high-quality instructional practices across the board for kids. So we have an expression where we hold it tight but keep it loose. . . . because we really want to balance and we want it to be intentional. So, for example, we are holding tight to the new literacy curriculum right now for three years and asking teachers not to refine it, not to substitute texts on their own until we’ve tried it for three years. And then we can have some meetings and discussions about substituting texts.

As these examples illustrate, skillful use of HQIM represented a fundamental shift in expectations for teachers, which required attention to establishing common understandings around the importance of consistent use of curricula.

Of note, none of the district respondents reported expecting teachers to develop their lessons in the absence of instructional materials. Some districts, in both IMPD and non-IMPD states, described allowing teachers to supplement the selected curriculum with teacher-selected materials. This was intended to leverage teacher expertise, as one district administrator explained:

As long as you’re teaching the state standards, [the curriculum is] just one tool. Now, it’s a big tool. We didn’t invest a lot of money to not be used, but you do have the opportunity to supplement, bring in the art of being the professional in that curriculum.

A few district administrators described examples of allowing ELA teachers to select different texts that addressed their instructional aims. For example, one district administrator described providing teachers with a list of eight texts from which to choose, alongside additional support from veteran teachers to ensure that newer teachers selected a variety of texts that would address academic standards. Another administrator similarly described this kind of tailoring or personalizing of the curriculum as follows:

A practical example would be maybe a high school teacher is working with students in a poetry unit and they’re talking about a relatively advanced concept like extended

metaphor or something like that, which is in the frameworks. But the materials they then choose to do that can be quite broad. It could be a song lyric, it could be a passage out of, I don't know, there's some good ones in the Odyssey, for example.

So the selection process, maybe it's coming out of a [state rating system] text approved by the [state], maybe it's a song that a student brought in, but the skill and the concept is there and no one's going to kick about that. But on the other hand, if there's a set of standards in there and the materials don't align with anything or aren't particularly helpful toward the goal for that year, then you're going to have to have some questions about that.

As this example illustrates, although this approach is responsive to the need to provide teachers with autonomy, it might diverge from the principles of skillful use of HQIM.

In interviews, more than 90 percent of districts reported specifying district curricula for their schools for at least some content areas and grade levels. About 20 percent of the districts reported providing lists of approved curricula from which schools could select, offering some autonomy for school-level selection. Less than 10 percent of districts provided schools more-substantial autonomy to select their own instructional materials; in these cases, autonomy was typically tied to a history of positive school performance. The prevalence of these responses in our nonrepresentative interview sample was fairly consistent across districts in both IMPD and non-IMPD states.

## **District Processes for Selecting Materials Were Complex and Involved Buy-In and Approval from District Administrators, Teachers, and Often Parents**

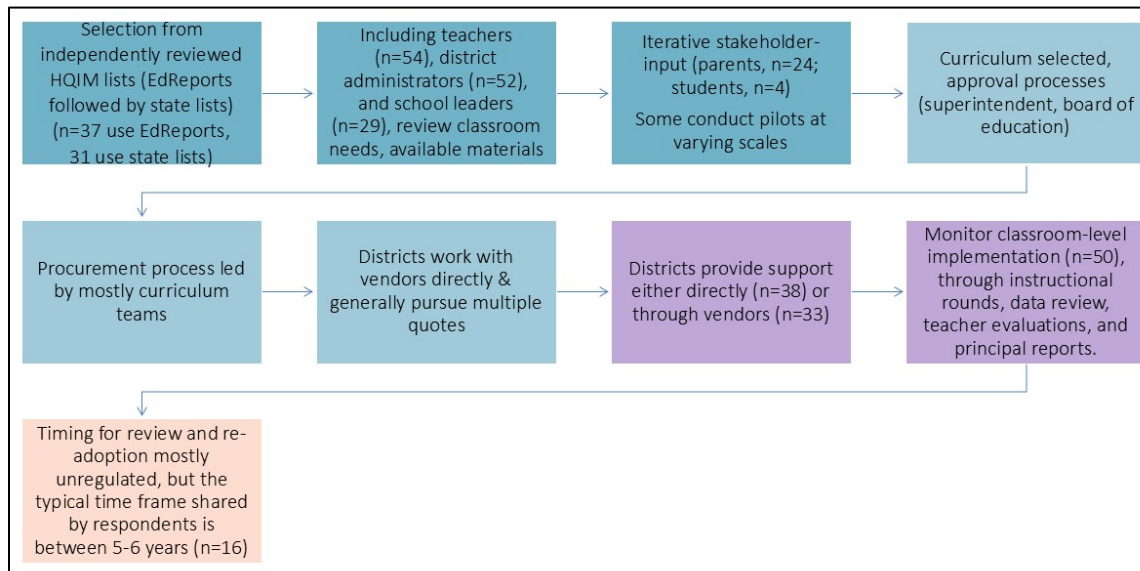
When selecting and adopting instructional materials, district administrators reported using multiple sources of information and several strategies to gather stakeholder feedback and buy-in during the adoption process. Notably, 70 percent of district administrator respondents in IMPD states reported using EdReports as a source for information about the quality of instructional materials, compared with just 15 percent of the district respondents in non-IMPD states. As one district administrator in an IMPD state noted: "If it's not Green [on EdReports], we throw it out." In contrast, district respondents in both IMPD and non-IMPD states reported similar use of state-curated lists of instructional materials (48 percent and 53 percent, respectively) and use of state-developed curriculum ratings (18 percent and 15 percent, respectively). Just 12 percent of district respondents in IMPD states (and none in non-IMPD states) also mentioned that they looked to curriculum adoption decisions from neighboring or similar districts in their state to guide their decisionmaking.

In addition to using existing ratings and recommendations, districts used detailed and sometimes complex review and piloting procedures as part of their instructional materials selection process (see Figure 6.1). District administrators in both IMPD and non-IMPD states reported engaging various stakeholders in their curriculum selection processes. In some cases, districts spent time developing shared understandings of and expectations for the quality and use of instructional materials. As one district administrator explained,

We typically spend about three or four months, first and foremost, getting feedback. What is it that we want and envision our classrooms to look like? Literally that was

what we talked about. That was first day, what do we want it to look like? And then look at the standards in ELA, we looked at the standards. We looked at the Science of Reading. We schooled everyone on math practices and what equity looks like in instruction. Now, what does that look like in math versus ELA?

**Figure 6.1. Typical District Approaches to the Instructional Materials Adoption Process**



Teachers were the most commonly engaged individuals in these processes (reported by administrators in 86 percent of districts). District administrators thought their participation was critical to ensuring buy-in for adopted curricula and supporting strong use of materials. For example, one district administrator described the importance of having teachers select from among a short list of vetted HQIM as follows:

I want teachers to have autonomy. I think it's critical that teachers have voice and the instructional materials. My job is quality control, but I'm not going to dictate what those quality materials are. Instead, I'm going to bring them a menu ensuring that every item on the menu that's offered to them is of quality and allow them to then make the selection. And that was something that we did in this past year. And there was another that was HQIM. And again, the teachers were able to sample those, and they made the decision that their favorite was [curriculum title], and we made the switch, and that was for reading.

Another district administrator explained how teachers played a role not just in reviewing instructional materials but also in pilot testing them in classrooms to see how they work for their students (just over half of the district administrators reported using some kind of trial or piloting of materials as part of their adoption process). This kind of involvement was thought to support both teacher buy-in and the selection of the best-fit materials, as this district administrator shared:

So in the adoption cycle, then we really rely on our teams, our teacher teams to vet the materials, pilot the materials, and then make a selection. So it's not really a top-down decision. It's really more like what is it that the teachers want to use? So that's kind of

on the instructional materials part of it, on the professional development part of it, I think the way that you get teacher buy-in is to make sure that the professional development that you're providing is relevant to adult learners, relevant to teachers, something that is not hoop for them to jump through, but something that's practical and helpful.

District administrators were also usually very involved in curricula adoption (in 82 percent of districts) and included such individuals as the English language learner director, special education director, content area specialists, and the superintendent. Almost half of the district respondents also noted that school leaders were typically involved in these instructional materials review and selection processes, and other staff, such as instructional coaches, in one-quarter of the districts. Almost 40 percent of district respondents also reported including parents in these processes, typically through specially designated curriculum committees. Few district administrators (6 percent) noted using any form of student feedback, such as surveys, and all of these district respondents were from non-IMPD states.

Almost all district respondents reported providing PL related to instructional materials to their teachers (though we could not discern what proportion of this support was HQPL). Districts used a combination of district-led support (used in 60 percent of respondent districts), such as PL provided by district departments or support from instructional coaches, and support purchased through instructional materials publishers or, in a few cases, through external support organizations, consultants, or university partnerships (together, 53 percent of districts).

Districts used a few approaches to monitoring the use of instructional materials in the classroom. The majority of district respondents stated that they relied on principals' observations of classroom instruction as a key lever to monitor the use of instructional materials. In many cases, districts created common instructional rubrics or observation tools to structure observations and walkthroughs, and to gather common data across schools. In a few cases, district administrators also reported revising teacher performance evaluation tools to collect information on the use of instructional materials. More than half of district respondents also described using instructional rounds or walk-throughs to get a snapshot of instruction across their schools. These varied in frequency from monthly to annually, and there was variation in the depth of focus on instructional materials use (versus general instructional practice). In addition, several district administrators reported that their primary means of measuring the use of instructional materials, at the district level, was by reviewing student performance on formative and summative assessments. Most district administrators reported using some combination of these approaches to gathering information on instruction. As one district administrator in an IMPD state shared,

We do data meetings at each building. I'm forever collecting data. I look at the dashboards of all of the platforms and principals have access to it as well to look for teacher usage, student usage, assessment results. We also share out data sheets that are collected. And I have coaches who monitored the [HQIM use] work and our principals monitored the work. We also have instructional rounds that take place throughout the district, and we'll do checkpoints with teachers.

There was, however, wide variation in approaches to collecting data. For example, one district administrator in a non-IMPD state described their procedures as less formalized. As they shared,

We don't have anything formal [to monitor curriculum use], but [teachers are] told that curriculum is to be used with fidelity. It would be obvious if they weren't doing it because they have to have collaborative meetings where they do lesson planning, instructional coaches and principals have to attend those. So there's enough eyes on things to where if somebody's not doing it and you're not holding it accountable, it's your fault then because it's definitely something you're aware of.

## **District Administrators Commonly Mentioned Specific State Policy, Supports, or Guidance as Informing Their Decisions but Infrequently Communicated with State Officials Regarding HQIM Work**

State supports for HQIM adoption and use were evident in district interviews. The majority of district administrators in IMPD states described policies, incentives, and supports provided by their SEA around HQIM adoption and use. For example, eight district administrators reported that they were motivated to adopt HQIM because of legislation mandating its use, and another nine administrators described formal SEA policies and tools that supported their HQIM adoption decisions. About a third of the district respondents from IMPD states also described using SEA grant opportunities related to HQIM, such as grants to fund their acquisition of HQIM and related technology, purchase of HQPL, and direct incentive payments for teachers participating in HQPL. Eight district respondents also reported accessing PL about HQIM from the SEA. A few district respondents in these states were motivated to adopt HQIM because of state monitoring, sometimes transparent to the public, of districts' instructional materials adoptions. In contrast, just one district respondent from a non-IMPD state reported accessing grant funding for instructional materials.

Outside these incentives and supports, district respondents in IMPD states described varied levels of interaction with SEA staff regarding HQIM. Eight of these district respondents reported having a specific point of contact at the SEA regarding HQIM work, but most communication was reportedly infrequent. In one case, a district leader reported frequent communication with SEA personnel regarding HQIM implementation resources, which declined because of staff turnover that disrupted these relationships. Overall, reviews of SEA support in IMPD states were fairly neutral. A few district respondents were very positive regarding SEA support around HQIM. As one district administrator who described SEA support noted:

Very helpful. I always felt like it was a little ironic that we were such a very local control state, which is kind of unfortunate because of the quality of the support and help and the knowledgeable people at our Department of Education. They've been outstanding to work with. That's true both in terms of the content area specialists, the Chief Academic Officer, the assessment department, our continuous improvement people at the department, they are wonderful to work with and extremely knowledgeable and helpful and accessible and just the best. So it's unfortunate that I think a lot of people don't reach out because again, with that local control, a lot of times I think people just don't, you don't have the reason to necessarily. But they've been wonderful to work, with very helpful.

Other district administrators in IMPD states identified their SEA interactions as mainly "advisory" or "newsletters that come down from on high." One district administrator characterized

SEA support around HQIM adoption as “not a very collaborative process. It’s just like, ‘Here’s a list, you know what to do, bye.’” Another district administrator noted that they tended to rely on reviewing legislation to understand their responsibilities around HQIM.

## **Examining Teacher Usage of HQIM and Participation in HQPL Through the American Instructional Resources Survey**

Finally, we use nationally representative survey data to investigate the extent to which (1) state IMPD membership or (2) the presence of select policies encouraging the use of HQIM is associated with teacher usage of HQIM and participation in HQPL (see “Identifying Use of HQIM and Participation in HQPL” box below).

We use data collected from the AIRS, which are nationally representative samples of K–12 public school teachers of ELA, mathematics, and science that captures what instructional materials are used in classroom teaching and how these materials are supported through PL, school leaders, and other supports; for more information on the AIRS, please refer to Appendix A. We use data from the AIRS to examine the extent to which state policy related to instructional materials (as measured through our policy scan) and membership in the IMPD Network are associated with (1) teachers’ usage of standards-aligned instructional materials and (2) participation in curriculum-based PL.

### Identifying Use of HQIM and Participation in HQPL

We use data from the AIRS to derive two measures: (1) whether teachers use HQIM at least once a week, which we term as *regular usage*, and (2) whether teachers participated in HQPL focused on the use of their instructional materials at least four to six times per year, which we term as *frequent participation*.

**Identifying usage of HQIM.** Following procedures used in prior AIRS research (e.g., Doan et al., 2022), we combine teachers' responses from the AIRS regarding which curriculum materials they use with curriculum ratings provided by EdReports to identify the prevalence of teachers' usage of HQIM. For the purposes of this analysis, we define *HQIM* using EdReports' ratings of curriculum materials' standards alignment. The AIRS provides respondents with a list of comprehensive curriculum materials specific to their subject and grade paths. Teachers indicate from this list any curriculum materials that they *regularly use*, which the AIRS defines as at least once per week. We match the materials teachers report using to their EdReports ratings and code teachers as regularly using a HQIM if at least one of the curriculum materials they reported regularly using was rated by EdReports as "meeting expectations" according to the organization's rubric based on college and career standards.

**Identifying frequent participation in HQPL.** We proxy participation in HQPL by looking at teachers' self-reports of how often they participate in PL that is focused on their instructional materials. Teachers are asked to indicate how frequently they participate in each of three modes of PL that was "focused on the use of their instructional materials": (1) coaching, (2) workshops or trainings, and (3) collaborative learning. Teachers were asked to indicate, in that given school year, the frequency with which they participated in that PL: (1) never, (2) one to three times per year, (3) four to six times per year, (4) one to three times per month, or (5) weekly or more often. Following guidance in Doan et al., 2022, we code teachers as *frequently participating in HQPL* if they reported participating in at least one mode of PL focused on their instructional materials at least four to six times per year.

## Examining the Relationship Between IMPD Network Membership, Use of HQIM, and Participation in HQPL

First, we use AIRS data to examine whether teachers in IMPD Network states were more likely to use HQIM or frequently participate in curriculum-based PL between 2018–2019 (the first school year the AIRS was administered) and 2023–2024. We do not have data from 2017–2018 school year, the year the IMPD Network was formed.

In total, 15 states (Arizona, Delaware, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Nebraska, New Mexico, Ohio, Rhode Island, Tennessee, Texas, Virginia, and Wisconsin) have been members of the IMPD Network in at least one school year during the period of our study. However, as shown in Chapter 1, Figure 1.1, states entered—and in one case (Wisconsin) exited—the IMPD Network at different periods. The following five groups of states, based on their entry or exit year, are members of the IMPD Network:

1. original IMPD Network member states (joined 2017–2018): Delaware, Louisiana,<sup>5</sup> Massachusetts, Mississippi, Nebraska, New Mexico, Rhode Island, Tennessee, and Wisconsin
2. 2020–2021 IMPD Network joiners: Arizona, Kentucky, Ohio, and Texas
3. 2020–2021 IMPD Network leavers: Wisconsin
4. 2022–2023 IMPD Network joiners: Maryland
5. 2024 IMPD Network joiners: Virginia.

Throughout the rest of this report, we will refer to each group as an *IMPD cohort*.

We approach our investigation of whether membership in the IMPD Network was related to both (1) teachers' usage of HQIM and (2) participation in HQPL in several ways. First, we investigate trends in teachers' use of HQIM and participation in HQPL in states that are and not members of the IMPD Network. This analysis is intended to build a foundational understanding of what these outcomes look like in these states, both individually and grouped by the points in time they entered the IMPD Network. Second, we examine how HQIM use and HQPL participation differed before and after states join the IMPD Network. By comparing states with themselves, this analysis provides a fairer benchmark for assessing the specific effect of the IMPD Network on these outcomes. However, we note that this analysis is limited to states joining the IMPD Network since the 2018–2019 school year, omitting the analysis of any potential effect of joining the IMPD Network among states that first joined the IMPD Network in 2017. We provide further description of each of these methods and their strengths and limitations in Appendix A.

## Teacher Usage of HQIM and Participation in Frequent HQPL Varied Widely Across States in the IMPD Network

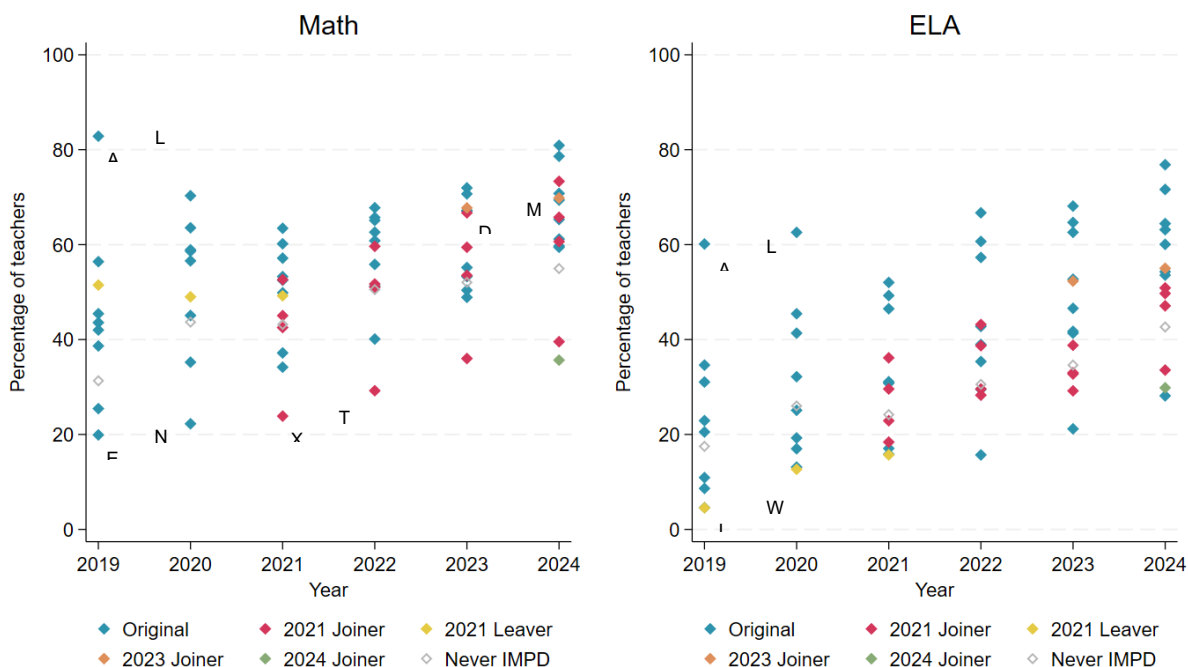
We show the percentage of teachers using at least one HQIM in mathematics and ELA from 2019 to 2024 in Figure 6.2. These figures are intended to depict the distribution and spread of state-level HQIM use rates within the IMPD Network; we report the specific HQIM use rates for each IMPD state by year in Appendix A, Table A.6. There are several descriptive trends of note. First, there is considerable variation in HQIM use rates within the IMPD Network. In 2019, Louisiana had the highest HQIM usage rates in both mathematics (83 percent) and ELA (60 percent); this finding is unsurprising given that the state, as we describe in Chapter 1, was a pioneer in HQIM policy and served as the model for many IMPD Network strategies. In omitting Louisiana, we still found that the remaining IMPD states varied a great deal: Usage rates of mathematics HQIM (in states other than Louisiana) in 2019 ranged from 20 percent (Nebraska) to 56 percent (Delaware). Similarly, we found that the spread of state-level usage rates of ELA HQIM in 2019 among IMPD states other than Louisiana was also roughly 30 percentage points, ranging from 5 percent (Wisconsin) to 35 percent (New Mexico). We found that the range of HQIM usage rates does not appear to narrow over time, particularly as new states enter the IMPD Network; the difference between the highest and lowest

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<sup>5</sup> Although Louisiana did not join the IMPD Network as a formal member until after the 2017–2018 school year, IMPD Network strategy and policy were explicitly based on strategy and policy used by the Louisiana Department of Education (see Chapter 3). Therefore, we consider Louisiana to be an original IMPD Network member.

ELA HQIM usage rates in 2024 is nearly 50 percentage points. Although the purpose of this report is to consider the implementation and efficacy of the IMPD Network as a whole, we note that the variation of state outcomes among member states in any given year reflects different starting points, policy trajectories, and conditions across the various states.

**Figure 6.2. Percentage of Teachers Who Used at Least One HQIM, by Subject and Year, 2019–2024**



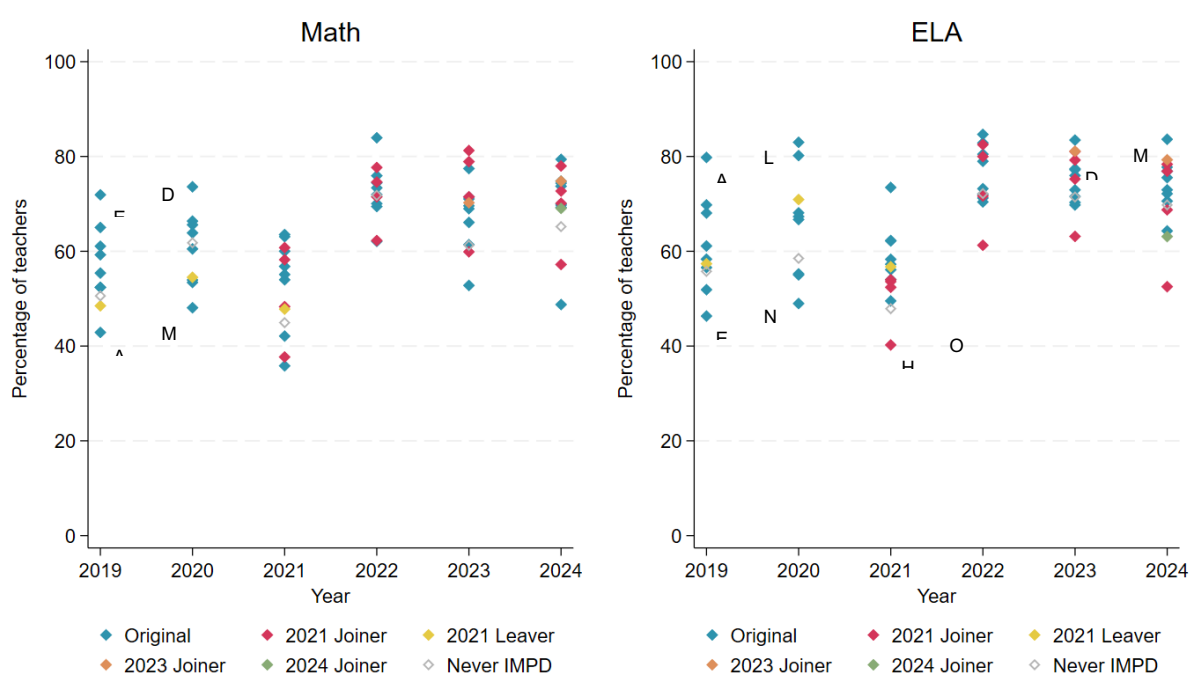
NOTE: This figure presents the percentage of mathematics and ELA teachers who reported regularly using at least HQIM by state and year for each IMPD state and an average of all never IMPD states. State averages are color-coded by IMPD cohort. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

One promising IMPD Network–wide trend in Figure 6.3 (with specific usage rates provided in Appendix A, Table A.6) is that, as of 2024, all IMPD Network states had higher ELA HQIM usage rates than they had in their first year in the Network, and all but one IMPD Network state had higher mathematics HQIM usage rates; the sole state not to see gains in mathematics HQIM usage was Louisiana, which had a Network-high rate of 83 percent in 2019 and a rate of 79 percent in 2024.<sup>6</sup> On average, IMPD states saw gains of 25 percentage points and 19 percentage points between their first year of participation and 2024 in their ELA and mathematics HQIM use rates, respectively. Notably, HQIM usage rates in states that never joined the IMPD Network also increased between 2019 and 2024, growing from 17 percent to 43 percent in ELA and 31 percent to 55 percent in mathematics.

<sup>6</sup> Virginia is omitted from this calculation because 2024 was the first year the state was an IMPD member.

As with the usage of HQIM, we observed a high degree of variation in teachers' engagement in frequent HQPL in both mathematics and ELA across states in the IMPD Network (see Figure 6.3). For example, in 2019, the percentage of teachers who frequently participated in mathematics HQPL ranged from 43 percent in Massachusetts to 72 percent in Delaware—a 29 percentage-point gap. In ELA, the percentage of teachers who partook in HQPL in 2019 ranged from 46 percent in Nebraska to 80 percent in Louisiana—a 33 percentage-point gap. We note that while Louisiana, in any given year, is among the states with the highest HQPL participation rates in mathematics or ELA, its rates are not outliers to the same degree that we observed when comparing HQIM usage rates in Figure 6.3.

**Figure 6.3. Percentage of Teachers Who Engaged in Frequent HQPL, by Subject, Year, IMPD Network Membership, and When Their State Joined the IMPD Network**



NOTE: This figure presents the percentage of mathematics and ELA teachers who reported frequently participating in HQPL by state and year for each IMPD state and an average of all never IMPD states. State averages are color-coded by IMPD cohort. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

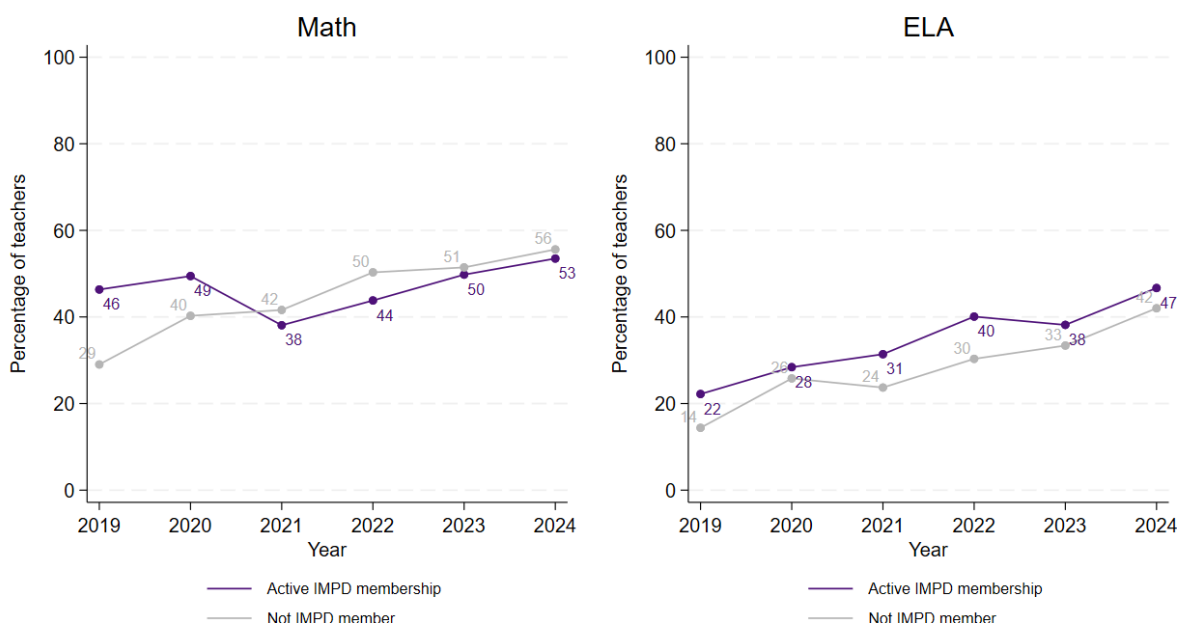
Similar to HQIM usage rates, we also found that IMPD states saw increases in the percentage of teachers who reported frequently participating in HQPL between their first year in the Network and 2024. Eighty-five percent and 92 percent of IMPD states saw increases in their HQPL participation rates during this period in ELA and mathematics, respectively. However, the magnitude of these increases was much smaller than what we observed for HQIM use: Both ELA and mathematics HQPL participation rates, on average, grew by roughly 13 percentage points in a given IMPD state. Participation in frequent HQPL also grew in non-IMPD states, from 56 percent to 70 percent for ELA HQPL and 51 percent to 65 percent for mathematics HQPL during this period.

## Usage of ELA HQIM Is Consistently Higher in IMPD States, Mathematics HQIM Results Vary by IMPD Cohort

Next, we examine IMPD Network–wide trends in the usage of HQIM. Figure 6.5 displays the percentages of mathematics and ELA teachers who used at least one HQIM, based on whether they taught in a state that was active in the IMPD Network in that school year. In the early years (2019 and 2020), teachers in active IMPD states were more likely to use mathematics HQIM than their counterparts in states that were not IMPD members. After 2020, however, both teachers in and outside the IMPD Network states were equally likely to use such materials. In ELA, teachers in states active in the IMPD Network were consistently more likely to use HQIM than their counterparts in states not active in the Network throughout the entire study period (except in 2020 when there were no statistically significant differences). However, we note that these differences are typically between 5 percentage points and 10 percentage points.

The patterns depicted in Figure 6.4 are affected by trends in usage within IMPD states and by the timing of when states entered or exited the IMPD Network. Specifically, the decline in use of mathematics HQIM in 2021 appears driven largely by the introduction of Texas to the IMPD Network, where 24 percent of teachers reported regularly using a mathematics HQIM (see Appendix A, Table A.6 for state-specific rates). Conversely, Maryland’s relatively high rate of mathematics HQIM use (68 percent) in 2023, the year the state joined the IMPD Network, increases the Network usage rate.

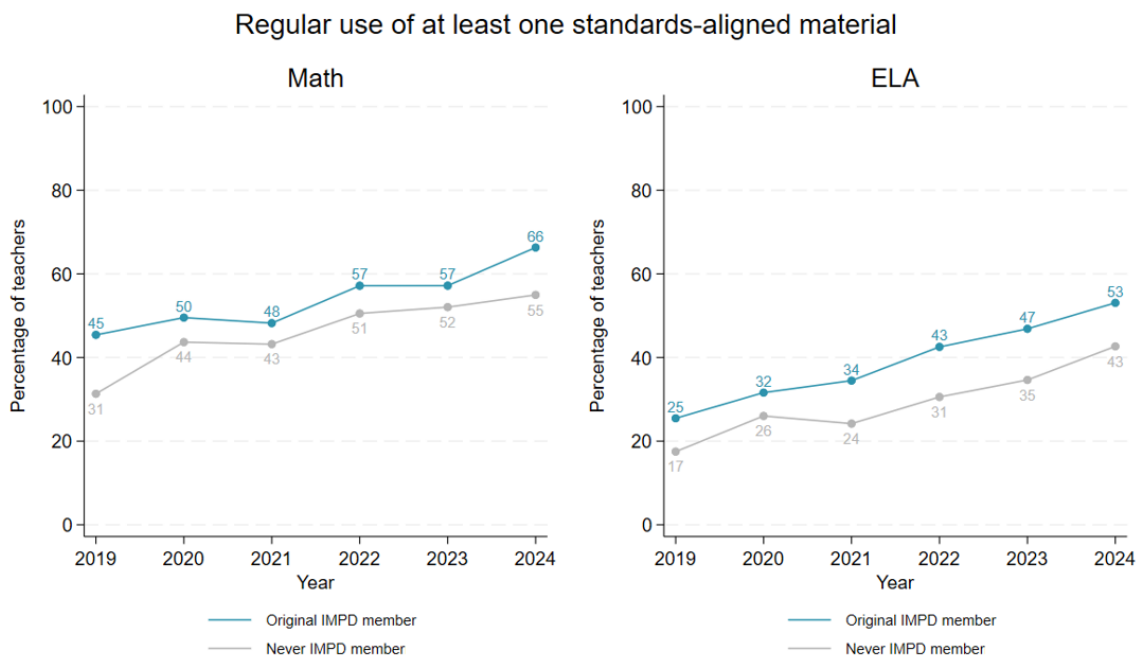
**Figure 6.4. Percentage of Teachers Who Used at Least One HQIM, by Subject, Year, and Their State’s IMPD Network Membership**



NOTE: This figure presents the percentage of mathematics and ELA teachers who reported regularly using at least one HQIM by year and active IMPD membership status. The term *active IMPD membership* is defined as states that are actively in the IMPD Network in that school year; see Figure 1.1. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

One way to examine trends that are not confounded by entry and exits into the IMPD Network is to group states according to the length of time they have been in the IMPD Network (i.e., by IMPD cohort). Figure 6.5 shows the rates of HQIM usage for the cohort of original IMPD Network members who joined the network during the 2017–2018 school year, compared with usage among states that never joined the IMPD Network; IMPD states that joined after the 2017–2018 school year are omitted from Figure 6.5. We do not have survey data from years before the IMPD Network started, preventing us from considering how the trajectories of original IMPD states and states that were never members of the IMPD Network may have changed since its start.

**Figure 6.5. Percentage of Teachers Who Used at Least One HQIM, by Subject, Year, and Their State’s Original IMPD Network Status**



NOTE: The figure presents the percentage of mathematics and ELA teachers who reported regularly using at least one HQIM by year and their state’s year of original IMPD membership. The term *original IMPD member* is defined as being one of eight states that were IMPD members at the IMPD Network’s start; see Figure 6.2. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

HQIM usage rates steadily grew from 2019 to 2024 in both original IMPD and never-IMPD states. However, notably, usage rates in each of these years were higher in original IMPD Network states than states that never joined the IMPD network, with gaps in usage rates between these two groups ranging from 5 percentage points to upward of 12 percentage points.

In Table 6.1, we show rates of HQIM use separately for each IMPD cohort with indicators for whether rates significantly differed from rates among never-IMPD states.

**Table 6.1. Percentage of Teachers Who Used HQIM, by Subject, Year, and Their State’s IMPD Cohort**

|                               | 2019               | 2020 | 2021 | 2022 | 2023 | 2024 |
|-------------------------------|--------------------|------|------|------|------|------|
| <b>Cohort</b>                 | <b>Mathematics</b> |      |      |      |      |      |
| Never IMPD                    | 31                 | 44   | 43   | 51   | 52   | 55   |
| Original IMPD                 | 45*                | 50   | 48   | 57*  | 57*  | 66*  |
| 2021 Joiners (AR, KY, OH, TX) |                    |      | 31*  | 37*  | 44*  | 48*  |
| 2021 Leavers (WI)             | 51*                | 49   | 49   |      |      |      |
| 2023 Joiners (MD)             |                    |      |      |      | 68*  | 70*  |
| 2024 Joiners (VA)             |                    |      |      |      |      | 36*  |
|                               | <b>ELA</b>         |      |      |      |      |      |
| Never IMPD                    | 17                 | 26   | 24   | 31   | 35   | 43   |
| Original IMPD                 | 25*                | 32*  | 34*  | 43*  | 47*  | 53*  |
| 2021 Joiners (AR, KY, OH, TX) |                    |      | 31*  | 39*  | 33   | 45   |
| 2021 Leavers (WI)             | 5*                 | 13*  | 16*  |      |      |      |
| 2023 Joiners (MD)             |                    |      |      |      | 52*  | 55*  |
| 2024 Joiners (VA)             |                    |      |      |      |      | 30*  |

NOTE: This table includes survey weights. An asterisk (\*) indicates that the percentage of teachers who used HQIM is statistically significantly different from the percentage of teachers in states that never become IMPD members who said similarly. We do not show estimates in survey years when states are not members of the IMPD because sample sizes are too small to generate reliable estimates (see Appendix A, Table A.1).

AR = Arkansas; KY = Kentucky; MD = Maryland; OH = Ohio; TX = Texas; VA = Virginia; WI = Wisconsin.

Rates of ELA HQIM usage are consistently higher among teachers in the original IMPD Network states compared with their counterparts in states who never joined the IMPD Network during the study period. These results are robust to covariate-adjusted and propensity score-weighted regression models that account for an array of teacher-level and school-level characteristics (see Appendix A for more information). When additional states joined the IMPD Network in 2021 or 2023, these states have usage rates that are at least as high, and often higher, than states that never joined the IMPD Network. This pattern is compounded by Wisconsin—an early IMPD Network state with particularly low usage of HQIM ELA materials—leaving the Network after 2021.

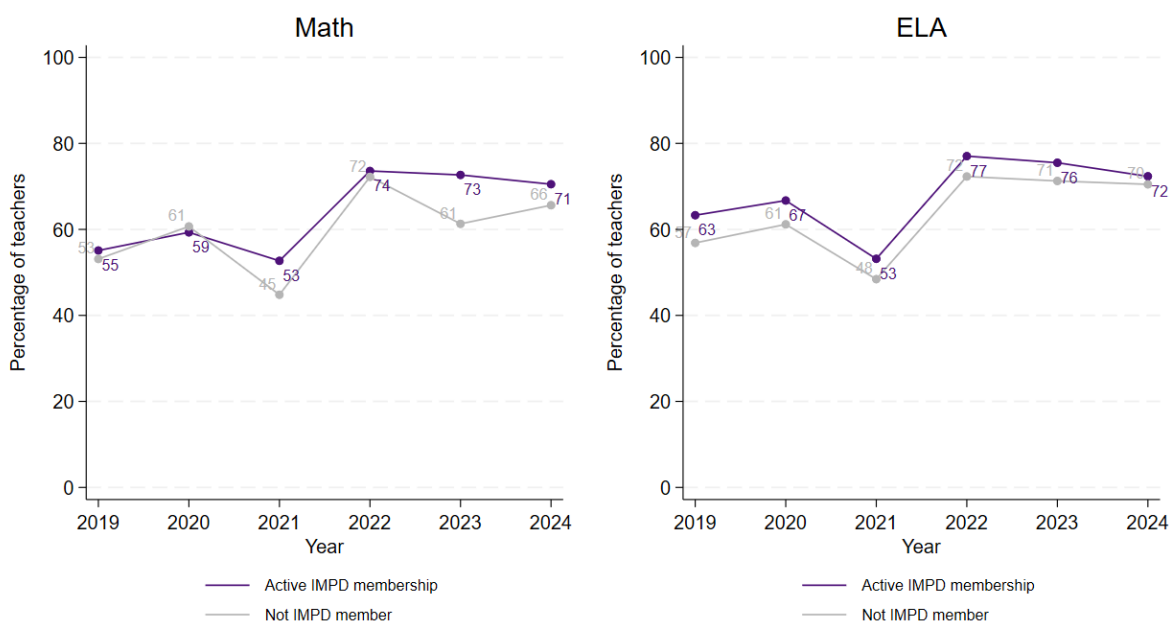
Whether usage rates of mathematics HQIM in IMPD Network states outpace usage in non-IMPD Network states is more complicated, with implications differing by each state’s entry cohort into the IMPD Network and what statistical adjustment strategies are used. Aligning with Figure 6.6, usage of mathematics HQIM is higher among original IMPD states than never IMPD states, with these differences significantly different in 2019 and 2022 through 2024. When accounting for a series

of teacher-level and school-level characteristics, we find significant differences among original IMPD states and never IMPD states in all survey years.

## IMPD Network States Have Slightly Higher Rates of Frequent Participation in HQPL

Next, we will show findings related to teacher participation rates in HQPL, following the same analytic procedures we used to investigate usage rates of HQIM. First, Figure 6.6 displays the share of teachers who engaged in frequent HQPL in mathematics or ELA each year, based on whether they taught in a state that was active in the IMPD Network that school year.

**Figure 6.6. Percentage of Teachers Who Engaged in Frequent HQPL, by Subject, Year, and Their State's IMPD Network Membership**

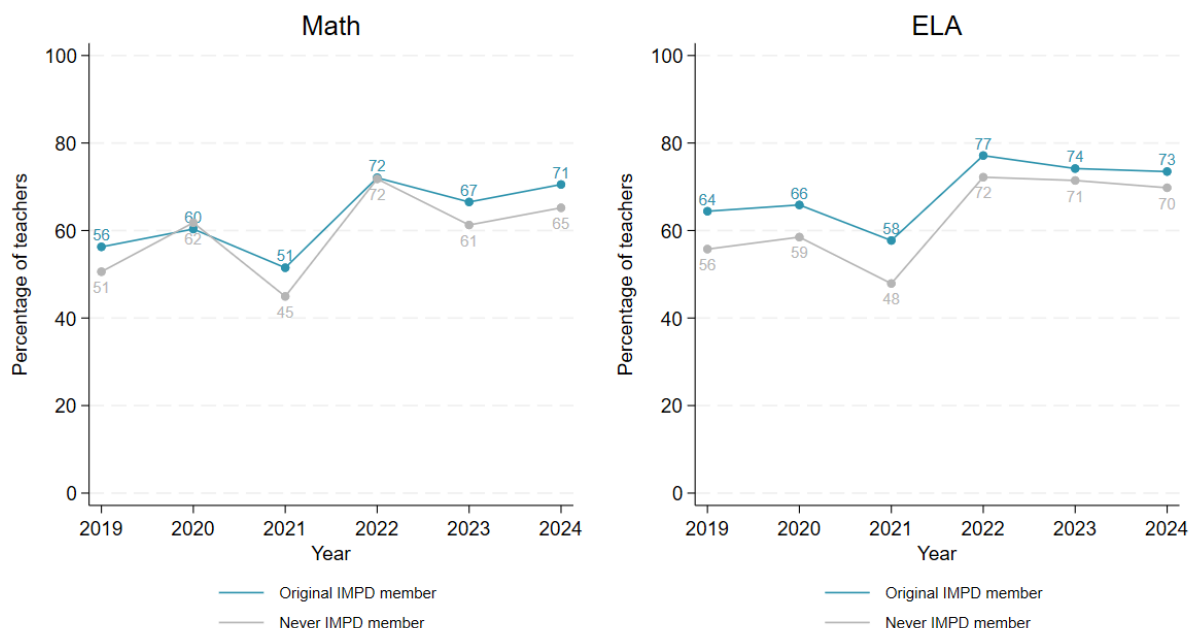


NOTE: The figure presents the percentage of mathematics and ELA teachers who reported frequently participating in HQPL by year and their state's active IMPD membership status. The term *active IMPD membership* is defined as states that are actively in the IMPD Network in that school year. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

At face value, these data show that participation rates are slightly higher among active IMPD Network states than states not actively in the IMPD Network. However, these differences are fairly small, ranging from about 2 percentage points to 6 percentage points in a given year.

Similar to our analysis of HQIM use, Figure 6.7 shows trends in HQPL specific to the eight original IMPD Network states and compares these trends with those of the states that were never members of the IMPD Network.

**Figure 6.7. Percentage of Teachers Who Engaged in Frequent HQPL, by Subject, Year, and Their State’s Original IMPD Network Status**



NOTE: The figure presents the percentage of mathematics and ELA teachers who reported frequently participating in HQPL by year and their state’s original IMPD membership. The term *original IMPD member* is defined as being one of eight states that were IMPD members at the Network’s start in 2018; see Figure 1.1. Yearly averages are estimated using data from the AIRS administered in that year. Each average is calculated using year-specific survey weights.

Unlike when examining HQIM usage rates, HQPL participation trends are broadly similar between active IMPD members and original IMPD members. Specifically, in mathematics, rates of mathematics HQPL in the original IMPD Network states were about on par with those in never IMPD states in 2019 and 2020. However, the original IMPD Network states began to pull away in the later years. Meanwhile, in ELA, the original IMPD Network states have rates of HQPL in the early years (2019 to 2022) that are consistently higher than states that never joined the IMPD Network. However, this gap closes such that, by 2023, teachers in the original IMPD Network states are participating in ELA HQPL no more often than their counterparts in states that never joined the IMPD Network.

Table 6.2 presents HQPL participation rates with states grouped by their IMPD cohort. Relative to patterns in the use of HQIM, where original IMPD network states had substantially higher use rates than 2021 joiners, rates of participation in frequent HQPL are relatively similar between original IMPD states and those that joined in 2021.

**Table 6.2. Percentage of Teachers Who Participated in Frequent HQPL, by Subject, Year, Their State’s IMPD Network Membership, and When Their State Joined the Network**

|                               | 2019               | 2020 | 2021 | 2022 | 2023 | 2024 |
|-------------------------------|--------------------|------|------|------|------|------|
| <b>Cohort</b>                 | <b>Mathematics</b> |      |      |      |      |      |
| Never IMPD                    | 51                 | 62   | 45   | 72   | 61   | 65   |
| Original IMPD                 | 56                 | 60   | 51*  | 72   | 67*  | 71*  |
| 2021 Joiners (AR, KY, OH, TX) |                    |      | 54*  | 74   | 76*  | 70   |
| 2021 Leavers (WI)             | 49                 | 55   | 48   |      |      |      |
| 2023 Joiners (MD)             |                    |      |      |      | 70   | 75*  |
| 2024 Joiners (VA)             |                    |      |      |      |      | 69   |
|                               | <b>ELA</b>         |      |      |      |      |      |
| Never IMPD                    | 56                 | 59   | 48   | 72   | 71   | 70   |
| Original IMPD                 | 64*                | 66*  | 58*  | 77*  | 74   | 73   |
| 2021 Joiners (AR, KY, OH, TX) |                    |      | 51   | 77   | 76   | 72   |
| 2021 Leavers (WI)             | 57                 | 71*  | 57   |      |      |      |
| 2023 Joiners (MD)             |                    |      |      |      | 81*  | 79*  |
| 2024 Joiners (VA)             |                    |      |      |      |      | 63   |

NOTE: This table includes survey weights. An asterisk (\*) indicates that the percentage of teachers who engaged in frequent curriculum-focused PL is statistically significantly different at  $p < 0.05$  from the percentage of teachers in states that never became IMPD members who said similarly. We do not show estimates in survey years when states are not members of the IMPD because sample sizes are too small to generate reliable estimates (see Appendix A, Table A.1).

In mathematics, both original IMPD states and states that joined in 2021 have higher rates of participation in HQPL in any given year than states that were never in the IMPD network: These differences were significantly different in 2021 and 2023; differences in 2024 were statistically significant only between original IMPD states and never IMPD states. For ELA, while participation rates in HQPL are higher for all groups of IMPD participating states than states that never participated in the IMPD Network, these differences are significantly different only for original IMPD states between 2019 and 2021 and never statistically significant for 2021 joiners in any year. Maryland, which joined the IMPD Network in 2023, had significantly higher rates of frequent HQPL in ELA in 2023 and 2024. Adjustments for observable teacher and school characteristics, as shown in Appendix A, generally conform to the purely descriptive results shown in Table 6.2, with rates of HQPL participation being slightly higher in IMPD Network states than non-Network states.

There Is Suggestive Evidence That, for a Given State, Joining the IMPD Network Is Positively Associated with Uptake in Usage of HQIM with No Association with Participation in HQPL

In previous sections, we examined whether teachers in IMPD Network states, defined in multiple ways, were more likely than teachers in non-IMPD Network states to use an HQIM or participate in frequent HQPL. However, as previously discussed, these trends alone are not sufficient evidence of an IMPD Network effect given that they do not account for what usage and participation rates looked like in each state prior to entry into the IMPD Network.

To better understand the specific effect of joining the IMPD Network, we use regression models that account for (1) trends over time in usage and participation rates that occur across all states and (2) between state-differences in average usage and participation rates. These models, referred to as two-way fixed effects (TWFE) models, effectively compare states among themselves prior to and since joining the IMPD network as a means of estimating the effect of joining the IMPD Network on HQIM usage and HQPL participation rates. This analysis has several important limitations, which are noted in Appendix A, but we emphasize a key caveat here: Because this analysis relies on data captured from a state prior to and since joining the IMPD Network, it will effectively omit data from any state that did not change IMPD membership between the 2018–2019 and 2023–2024 school years. This means that original IMPD states are not reflected in these estimates. Instead, these estimates will be mostly based on data from the four states that joined the IMPD Network in 2021 (Arizona, Kentucky, Texas, Ohio). Data from states joining in 2023 (Maryland) and 2024 (Virginia) also factor into these estimates but to lesser degree, given that there are fewer years of data in which these states have been IMPD Network members.

Table 6.3 presents the results of these regressions, which show the association between IMPD membership on teachers’ use of HQIM after accounting for time and state trends. Specifically, after accounting for (1) general upward trends in usage of HQIM and (2) a variety of factors, including personal and school demographics, in usage of HQIM was an average of 4 percentage points higher in mathematics and 9 percentage points higher in ELA during years in which they were IMPD Network members, relative to years when they were not in the IMPD Network. However, we note that neither of these estimates was statistically significant at conventional levels.

Table 6.3. Regression Results for Use of HQIM for TWFE Models

|                        | Mathematics    | ELA            |
|------------------------|----------------|----------------|
| Active IMPD membership | 0.04<br>(0.02) | 0.09<br>(0.04) |

NOTE: This table shows the estimated association between active IMPD membership and use of HQIM from a TWFE model controlling for fixed state and year effects. Models for mathematics and ELA are estimated separately. Standard errors appear in parentheses. See Appendix A for more details about regression specifications.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table 6.4 presents the average effect of IMPD membership on teachers’ engagement in frequent curriculum-focused PL. At face value, we found that IMPD membership was associated with a four

percentage point increase in frequent curriculum-focused PL in mathematics and a three percentage point decrease in ELA. However, these estimates are not statistically significant, with standard errors of roughly the same magnitude as the estimated effects. Therefore, we conclude that we could not find evidence of a relationship between IMPD membership and participation in frequent curriculum-focused PL.

**Table 6.4. Regression Results Participation in Frequent Participation in HQPL for TWFE Models**

|                        | Mathematics    | ELA             |
|------------------------|----------------|-----------------|
| Active IMPD membership | 0.04<br>(0.05) | −0.03<br>(0.02) |

NOTE: This table shows the estimated association between active IMPD membership and frequent participation in HQPL from a TWFE model controlling for fixed state and year effects. Models for mathematics and ELA are estimated separately. Standard errors appear in parentheses. See Appendix A for more details about regression specifications.  
 \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### Examining the Relationship Between State HQIM Policy, Use of HQIM, and Participation in HQPL

In addition to examining potential associations with IMPD membership, we also investigate whether teacher use of HQIM and participation in HQPL are linked to the presence of state HQIM policy as coded as part of our policy scan analysis (see “HQIM Policies in Policy Scan” in Chapter 5). We note that these analyses do not account for whether or not a state was an IMPD Network member.

#### State Requirements for Adoption and Funding Are Linked to ELA HQIM Use and ELA HQPL Participation

In Table 6.5, we show the percentage of teachers using HQIM in ELA and mathematics, separated by the presence of various HQIM policies. As a reminder, the policy scan serves as a “snapshot” of state HQIM policy as of April 2024, aligning with the date when the 2024 AIRS was fielded.

**Table 6.5. Relationship Between State HQIM Policy and Usage of HQIM, 2024**

| Policy                                                                        | % Use of ELA HQIM in States . . . |             | % Use of Math HQIM in States . . . |             |
|-------------------------------------------------------------------------------|-----------------------------------|-------------|------------------------------------|-------------|
|                                                                               | Without Policy                    | With Policy | Without Policy                     | With Policy |
| IM1: State review of instructional materials (63% of states)                  | 41                                | 45          | 59                                 | 53*         |
| IM2: State data collection on instructional material adoption (33% of states) | 42                                | 46          | 56                                 | 53          |

| Policy                                                                                                | % Use of ELA HQIM in States . . . |             | % Use of Math HQIM in States . . . |             |
|-------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|------------------------------------|-------------|
|                                                                                                       | Without Policy                    | With Policy | Without Policy                     | With Policy |
| IM3: State provides guidance on selection of instructional materials (61% of states)                  | 42                                | 44          | 55                                 | 55          |
| IM4: State requirements for adopting instructional materials (18% of states)                          | 42                                | 52*         | 55                                 | 52          |
| IM5: State funding for instructional materials (35% of states)                                        | 41                                | 46*         | 54                                 | 56          |
| IM6: State pricing for instructional materials (29% of states)                                        | 40                                | 49*         | 57                                 | 51*         |
| PL1: State includes instructional material alignment in definition of high-quality PL (20% of states) | 41                                | 46*         | 56                                 | 53          |
| PL2: State rating or recommendation of providers of curriculum-based PL (55% of states)               | 42                                | 46          | 56                                 | 54          |
| PL3: State provision of curriculum-based PL (49% of states)                                           | 43                                | 45          | 55                                 | 55          |
| PL4: State provision of funds for curriculum-based PL (35% of states)                                 | 42                                | 45          | 53                                 | 57          |
| EP1: State includes using/selecting instructional materials in EPP requirements (37% of states)       | 43                                | 44          | 56                                 | 54          |

NOTE: This table shows the percentage of teachers regularly using ELA and mathematics HQIM in states with and without a particular HQIM policy in the 2024 AIRS; see Table 6.1 and 6.2 for information on HQIM policy coding. The percentage of states with a specific policy is noted in the policy description. An asterisk (\*) indicates that the difference between states with and without a particular HQIM is significantly different at the  $p < 0.05$  level.

Unsurprisingly, the policies most associated with the usage of HQIM materials are those that directly affect how materials are reviewed, funded, or otherwise incentivized within a given state. A surprising finding is the different relationships between these policies and usage in ELA and mathematics.

Beginning with ELA, states that had requirements for adoption of specific instructional materials (IM4), funding for adoption of specific materials (IM5), and set prices for specific instructional materials (IM6) saw higher percentages of teachers using HQIM. For example, 52 percent of teachers used an ELA HQIM in states with requirements for adopting specific instructional materials, compared with only 42 percent of teachers in states without such guidance. We also found significantly higher usage rates of ELA HQIM in states that included alignment to instructional materials in their definition of what constitutes HQPL (PL1). No other PL policy or EPP policy was significantly associated with higher usage of HQIM in either ELA or mathematics. Curiously, when looking at mathematics, we found that usage rates were lower in states that provided reviewed or rated instructional materials (IM1) and those that set fixed prices for specific materials (IM6). Usage of SA

mathematics materials did not appear significantly related to other policies related to instructional materials, PL, and education preparation.

Next, Table 6.6 shows the relationship between these policies and the prevalence of frequent HQPL participation (i.e., at least four to six times per year).

**Table 6.6. Relationship Between State HQIM Policy and Rates of Participation in HQPL, 2024**

| Code                                                                                            | % Participation in ELA<br>HQPL in States . . . |             | % Participation in Math<br>HQPL in States . . . |             |
|-------------------------------------------------------------------------------------------------|------------------------------------------------|-------------|-------------------------------------------------|-------------|
|                                                                                                 | No Policy                                      | With Policy | No Policy                                       | With Policy |
| IM1: State review of instructional materials (63% of states)                                    | 70                                             | 72          | 66                                              | 68          |
| IM2: State data collection on instructional material adoption (33% of states)                   | 70                                             | 73          | 66                                              | 68          |
| IM3: State provides guidance on selection of instructional materials (61% of states)            | 74                                             | 69          | 68                                              | 67          |
| IM4: State requirements for adopting instructional materials (18% of states)                    | 70                                             | 77*         | 67                                              | 66          |
| IM5: State funding for instructional materials (35% of states)                                  | 68                                             | 74*         | 65                                              | 69          |
| IM6: State pricing for instructional materials (29% of states)                                  | 68                                             | 77*         | 66                                              | 69          |
| PL1: State includes instructional material alignment in def. of high-quality PL (20% of states) | 70                                             | 72          | 67                                              | 68          |
| PL2: State rating or recommendation of providers of curriculum-based PL (55% of states)         | 71                                             | 72          | 67                                              | 68          |
| PL3: State provision of curriculum-based PL (49% of states)                                     | 70                                             | 74*         | 66                                              | 69          |
| PL4: State provision of funds for curriculum-based PL (35% of states)                           | 71                                             | 71          | 66                                              | 68          |
| EP1: State includes using/selecting instructional materials in EPP requirements (37% of states) | 72                                             | 70          | 65                                              | 68          |

NOTE: This table shows the percentage of teachers frequently participating in ELA and mathematics HQPL in states with and without a particular HQIM policy in the 2024 AIRS; see Tables 6.1 and 6.2 for information on HQIM policy coding. An asterisk (\*) indicates that the difference between states with and without a particular HQIM is significantly different at the  $p < 0.05$  level.

Broadly, we find that teachers' participation in HQPL for ELA is higher in policy environments where teachers' usage of SA ELA materials is also high: Teachers were more likely to be frequent HQPL participants in states where the use of specific instructional materials was required. Funding and set pricing were provided for these materials. Among PL-specific policies, we found that

participation in HQPL among ELA teachers was significantly higher in states that provided curriculum-based or standards-based PL (74 percent) than those that did not (70 percent). We did not find that the prevalence of frequent participation in HQPL among mathematics teachers was significantly associated with any policies we coded as part of our policy scan.

## Discussion and Implications

Since 2017, the IMPD Network has supported state department of education leaders in promoting the use of HQIM among K–12 teachers. At the time of this report’s writing, 14 states are IMPD Network members, growing from an original size of seven states. In this report, we use data collected from document reviews, interviews with CCSSO staff, state leaders, and district leaders, and a nationally representative survey to describe the work of the states participating in the IMPD Network and some comparisons to non-IMPD states. We summarize several key findings and present implications for intermediary organizations, such as CCSSO and the IMPD Network, that seek to advance state policy through the use of multistate networks, and SEAs that are engaged, or considering engaging, in work that advances their HQIM policy.

### Summary of Key Findings

**The IMPD Network provides member states with consistent, clearly specified goals and structures and opportunities to tailor their policy work to local contexts.** The IMPD Roadmap, which serves as the Network’s “backbone,” defines a standard set of key policy goals and questions but allows member states to select the strategies and levers best suited for accomplishing these goals. Varied levels of influence or authority over districts and schools can make different policy approaches or strategies more or less successful. Amid local control, it is important to emphasize common challenges and solutions. By maintaining consistent and clearly articulated policy areas over the life of the network, the IMPD Network helped member states focus on the topic of HQIM even as agency leadership and priorities shifted. Also, it encouraged states to deepen and enhance their policy work over time (rather than moving on to new topics after initial efforts). In addition, consistent supports (e.g., coaching model, convenings, project management tools) provided state teams with a dedicated space to work on HQIM policy and strategy and accountability to make progress. These kinds of structures can also help maintain sustained attention on key policy areas.

**Member states regard IMPD-provided supports positively—especially access to their IMPD coaches and the regular IMPD convenings.** In particular, states benefited from coaches and other resources that can map networkwide goals to state-specific challenges and capacities. We find that coaches were valuable in helping SEAs overcome common institutional barriers and build key organizational capacities to support policy change, such as improving agency alignment and common goals and developing project management, communications, and data use capabilities. Coaches also helped SEAs manage staff and leadership turnover and maintain HQIM priorities in light of staffing churn. SEA leaders indicated that, absent these supports, they seldom have access to personalized support and policy expertise. In addition, coaches benefited from strong support from the IMPD hub

staff, including regular meetings for coaches to collaborate, problem solve, and share policy progress across the states.

**States benefited from access to connections and expertise across the IMPD Network, including with peer states.** Peer learning was a major benefit of IMPD participation for SEAs. It helped SEAs to consider new policy strategies, challenge preconceived notions about the feasibility of different policy strategies, and plan to avoid potential pitfalls in implementation. Given their roles, SEA administrators typically do not have colleagues in similar jobs in their states to share ideas, experiences, and feedback. In IMPD states, we learned that SEA administrators were surprised to find that policy strategies from other states, with minor adaptations, were also effective in their unique context. A few states also benefited from strategically drawing on resources or services developed for a national audience, with specific modifications to meet local needs and expectations better (e.g., integrating EdReports curriculum ratings as part of a state HQIM recommendation system informed by state standards and local priorities). Cross-state networks may provide valuable opportunities for learning and sharing new approaches to policy adoption and implementation.

**IMPD state leaders reported that IMPD supports led to improved alignment of SEA structures, routines, and activities; enhanced access to knowledge and expertise; and development of individual knowledge and skills.** The leaders reported that they still needed additional capacity for adequate, stable staffing and resources and improved alignment in SEA structures, routines, and activities to continue moving the work forward. We found that supporting alignment of goals and work across departments within the SEA, connecting SEA administrators to a network of experts, and developing SEA administrators' individual skills and knowledge were beneficial for policy planning, adoption, and implementation. Nonetheless, limits to staffing (such as turnover and limited time) presented perennial challenges.

**Both IMPD states and their coaches agreed that state HQIM work was furthest along in helping schools and districts identify and acquire HQIM.** Conversely, member states made relatively less progress on policies that targeted HQPL and EPPs. Supporting HQIM use at scale requires substantial resources, time, and staffing for SEAs. For example, supporting all teachers through HQPL requires a large number of curriculum experts across a variety of HQIM. IMPD states took varied approaches to these complex activities at scale, ranging from marshalling resources and staffing their departments to provide these supports in-house to vetting and engaging vendors to provide some or all of these services.

There are inherent trade-offs to these approaches. On the one hand, using SEA staff to support HQIM work directly can lend legitimacy or credibility to the work and allow for more consistency and alignment in communications and vision. Working with vendors, on the other hand, may allow the SEA to more quickly and effectively scale its HQIM supports to varied district contexts. It is also important for SEAs to understand the implications for sustainability, as they undertake activities that require ongoing support (e.g., curriculum quality vetting processes that require regular review).

**HQIM work is complex and requires measurement at multiple levels to realize the goals of adoption and skillful use of HQIM at scale.** As SEAs pursued each of the IMPD roadmap policy areas, they purposefully used strategies to help incentivize and support the adoption and skillful use of HQIM. Despite these efforts, however, state leaders identified challenges in implementation, such as limited or variable district compliance in reporting their HQIM. They also raised questions about the

extent to which district adoption translates into skillful use of HQIM in the classroom and about how to assess the use of HQIM at scale. Furthermore, our district interviews revealed that while many district leaders reported using state resources related to HQIM adoption (e.g., approved materials lists, funding), these resources were only one input in larger, often complex selection processes to acquire materials and PL. Although SEA policy and guidance are often integrated into these procedures, district administrators believe that these efforts must consider local context and fit and build consensus around instructional materials selection. This may present challenges to the coherence of local and state policy and the productive (rather than compliant) implementation of state policy. Meaningful implementation of HQIM policy depends on myriad changes in behavior across the educational system, such as shifts in principal and teacher beliefs about instruction and expectations for students, uptake and understanding of training and PL, and eventual use of HQIM in the classroom.

**Teacher HQIM use and HQPL participation, especially in ELA, are higher in states that are IMPD members or have policies related to the use of HQIM.** We conducted descriptive analyses that separately examine associations between IMPD membership and state HQIM policy and teachers' likelihood of using HQIM or frequently participating in HQPL. For select states, we were also able to examine how these teacher outcomes differed before and after joining the IMPD Network. Our data and methods are limited and do not permit causal inference of the effects of IMPD membership or specific state policies. (See Appendix A for further discussion.) However, considering the available evidence, the data and methods suggest that IMPD membership and state HQIM policy were most consistently linked to usage rates of ELA HQIM. We found mixed evidence when examining associations with math HQIM or HQPL participation in either subject, suggesting that these outcomes were largely comparable between IMPD and non-IMPD states.

The differences in findings between ELA and mathematics HQIM are curious and suggest several reasons why these differences might have occurred. Because state instructional materials review and adoption processes typically stagger subjects across years, these findings may reflect differences in the timing of when IMPD states decided to work on ELA and mathematics adoptions. However, there are other reasons why state policy work may be more prone to affecting ELA HQIM rather than mathematics HQIM. First, teachers may be more inclined to use comprehensive mathematics curriculum materials without IMPD Network support, resulting in less room to grow in that subject. From the 2019 AIRS data, we found that mathematics teachers were more likely than ELA teachers to report using a single curriculum material with limited modification (Kaufman, Doan, and Fernandez, 2021).

On the other hand, ELA teachers were more likely to report using self-created materials or cobbling together multiple materials to plan instruction. It is possible that the more fractured use of ELA instructional materials in the early years of the IMPD Network meant potentially greater improvements in HQIM use as a result of Network participation. Second, our study coincides with the emergence of a Science of Reading movement that has led to states taking greater interest in the materials and training of teachers who deliver early grades' reading and literacy instruction. The co-occurrence of IMPD Network membership and the Science of Reading movement may have resulted in states creating greater alignment and urgency around supporting ELA HQIM use.

## Recommendations for Advancing HQIM and HQPL Initiatives

Using the findings from our study of the IMPD Network, we list several actionable recommendations to guide the advancement of HQIM and HQPL initiatives for three difference audiences: (1) intermediaries and networks interested in building partnership across states, (2) state educational agencies interested in advancing HQIM policy, and (3) funders of intermediaries and networks. These recommendations aim to support effective policy development, implementation, and sustainability by addressing key challenges and leveraging opportunities for collaboration, capacity-building, and long-term impact.

### Recommendations for Intermediaries and Multistate Networks

- **Set clear goals and track progress:** Specify goals and maintain focus on these goals while allowing flexibility in how states pursue them. Regularly measure and transparently communicate member progress on these goals to provide accountability, inform adjustments, and motivate ongoing progress.
- **Use structure to focus time and attention on consistent, specific policy goals:** Structure the work to encourage SEAs to dedicate time, space, and attention to specific HQIM and HQPL policy goals. Support the deepening of policy work at the local level over time.
- **Provide coaching expertise:** Offer members access to experienced coaches, with policy and strategy expertise, project management skills and tools, and a strong understanding of local contexts to effectively guide policy work.
- **Facilitate peer collaboration:** Create opportunities for peer or role-alike collaboration on shared policy goals with appropriate supports for shared learning and interaction.
- **Document and share strategies:** Document effective state strategies and provide guidance on adapting them to local contexts. Share best practices across member states to foster innovation and alignment.
- **Build SEAs organizational capacity:** Assist SEAs in assessing their existing organizational capacity and aligning their structures and procedures across departments and silos. Support the development of communications and data skills critical for advancing policy strategies.
- **Plan for sustainability:** Support SEAs in prioritizing long-term sustainability of HQIM and HQPL policy work through tools and monitoring protocols that require participants to plan for funding, staffing, and organizational alignment.
- **Focus on behavioral change:** Assist SEAs in identifying how their strategies will drive behavioral changes of actors across the system while setting appropriate measures and targets for these changes to use this information to guide ongoing work.

### Recommendations for SEAs

- **Define and prioritize goals:** Identify clear goals for HQIM and HQPL policy work. Create opportunities for team members to dedicate regular time to maintaining a consistent focus on these priorities.

- **Identify peer networks and leverage expertise:** Identify and connect peers in similar roles across SEAs to share learning experiences and strategies on policy goals. Leverage experienced coaches and consultants with policy and project management expertise to assist leaders and their teams in managing complex policy development and implementation work.
- **Adapt policy strategies:** Survey national and state policy approaches to identify promising policy strategies and adapt them to local contexts.
- **Address implementation challenges:** Analyze the SEAs' organizational capacity gaps and pursue alignment and support to overcome typical policy challenges.
- **Ensure long-term sustainability:** Plan for the sustainability of funding and staffing to support HQIM and HQPL initiatives when developing and implementing new procedures and processes to ensure that activities can be supported in the long term.
- **Balance support models:** Balance direct SEA support to districts, schools, and educators by leveraging external providers to facilitate scalability and sustainability.
- **Integrate with school district policies:** Assess existing district policies and activities before implementation. Provide clear guidance on how new state policies or activities will supplement, supplant, or integrate with existing district practices.
- **Track behavioral changes:** Identify the behavioral changes envisioned for district administrators, school leaders, educators, and other support staff. Set measurable targets and monitor implementation progress to support these shifts.
- **Leverage national movements:** Capitalize on broader national policy movements to build urgency and allyship around advancing HQIM and HQPL work.

## Recommendations for Funders

- **Focus on clear, consistent, and specific goals:** Encourage grantees to clearly specify their goals and maintain a consistent focus on HQIM and HQPL priorities while offering consistent supports and accountability structures.
- **Support behavioral change tracking:** Encourage intermediaries and SEAs to identify target behavioral changes of actors across the system, along with associated measures and benchmarks, including how implementation proceeds, emergent challenges, and impact.
- **Plan for long-term investments:** Acknowledge the lengthy time frame needed for state policy changes to translate into classroom-level improvements, instruction, and student experience. Plan investments to appropriately support ongoing and deepening work.

# Survey Data Analysis

## Overview of the AIRS

We use AIRS data to examine the associations between IMPD Network membership and teacher usage of HQIM and teacher participation in HQPL. As of this writing in spring 2025, the AIRS has been administered six times, spanning the 2018–2019 to 2023–2024 school years. The AIRS is administered in the spring of each school year to nationally representative samples of K–12 ELA, mathematics, and science teachers who are members of RAND’s American Teacher Panel (ATP). In this analysis, we look at data only from ELA and mathematics teachers because (1) these subjects, during the period of this study, have been the primary focus of the IMPD Network’s work and (2) EdReports ratings of science curriculum materials are limited relative to ELA and mathematics materials.

Panelists are recruited into the ATP through probability-based methods from a commercially available list of U.S. public school teachers provided by MDR Education. As of spring 2025, the ATP includes about 25,000 teachers. Panelists are subsequently sampled to be invited to participate in specific surveys, including the AIRS, using probabilistic sampling methods. Survey samples are designed and weighted such that when survey weights are applied, survey results can be interpreted as representative of the national teacher population at the time of survey administration.

Importantly, sampling for each AIRS is done independently. However, because all AIRS invitees are members of the ATP, there is significant, though incidental, overlap in survey samples across administrations. On average, roughly 15,000 K–12 teachers were sampled for each AIRS administration—a significant share of all ATP members. Completion rates for the AIRS hover around just over 50 percent each school year. Across school years, the total number of survey respondents ranges from approximately 6,000 to 9,000 teachers (see Table A.1).

**Table A.1 Sample Sizes and Completion Rates for the AIRS, by Survey Year**

|                  | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Number sampled   | 10,772      | 10,891      | 13,322      | 15,136      | 19,260      | 17,445      |
| Number responded | 5,969       | 5,978       | 7,217       | 8,063       | 8,530       | 9,126       |
| Completion rate  | 55.4%       | 54.9%       | 54.2%       | 53.3%       | 49.2%       | 55.9%       |

Each survey sample includes state-representative oversamples of teachers in a subset of states. That is, teachers in specific states were oversampled in some AIRS years to be able to generate state-level estimates. The target number of completes to produce state-level estimates was typically 400 teachers. The list of oversampled states fluctuates across AIRS years, which also explains why the total number of teachers sampled fluctuates across AIRS administrations (see Table A.1).

The state oversamples available for each AIRS administration roughly correspond to IMPD membership status in that respective school year, as shown in Table A.2. For example, Arkansas joined the IMPD in 2021 and became an AIRS oversampled state in 2021. However, several exceptions to this affect our analytic decisions in several ways. First, with few exceptions (i.e., California, Florida, New York, and Washington), we do not have state-representative samples for states outside the IMPD Network. As a result, although we can analyze aggregated data from non-IMPD states, we cannot compare the results across the majority of non-IMPD states. Second, the AIRS was first administered in the second academic year (2018–2019) of the IMPD Network’s operation. This means that we cannot speak to outcomes from the first year of the Network’s operation and, more importantly, we do not have pre-trend data for the cohort of eight states that joined the IMPD Network in 2017–2018. Last, we do not have state-representative data from states in years in which they were not IMPD Network members. Therefore, even for states that joined the IMPD Network during the study period (e.g., Arkansas, Kentucky), we cannot produce representative, state-specific pre-trends for that state because of small sample sizes. These limitations pose the largest challenges to our TWFE models, which are described in more detail later in this appendix.

Table A.2. List of IMPD Membership Status and Oversampled States, by Survey Year

| State | 2019        |             | 2020        |             | 2021        |             | 2022        |             | 2023        |             | 2024        |             |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|       | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled |
| AR*   |             |             |             |             | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| CA    |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |
| DE*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| FL    |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |
| KY*   |             |             |             |             | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| LA*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| MA*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| MD*   |             |             |             |             |             |             |             |             | ✓           | ✓           | ✓           | ✓           |
| MS*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| NE*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| NM*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| NY    |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |             | ✓           |
| OH*   |             |             |             |             | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| RI*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| TN*   | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| TX*   |             |             |             |             | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |
| VA*   |             |             |             |             |             |             |             |             |             |             | ✓           | ✓           |
| WA*   |             |             |             |             |             |             |             | ✓           |             | ✓           |             | ✓           |

| State    | 2019        |             | 2020        |             | 2021        |             | 2022        |             | 2023        |             | 2024        |             |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled | IMPD Member | Oversampled |
| WI*      | ✓           | ✓           | ✓           | ✓           | ✓           | ✓           |             |             |             |             |             |             |
| <i>N</i> | 9           | 12          | 9           | 12          | 13          | 16          | 12          | 16          | 13          | 17          | 14          | 18          |

NOTE: An asterisk (\*) indicates states that were IMPD Network members for one year or longer between 2019 and 2024. CA = California; DE = Delaware; FL = Florida; LA = Louisiana; MA = Massachusetts; MS = Mississippi; NE = Nebraska; NM = New Mexico; NY = New York; OH = Ohio; RI = Rhode Island; TN = Tennessee; WA = Washington.

## Construction of Analytic Dataset

To support analyses, we constructed a *teacher*  $\times$  *year* dataset, combining data from each year of the AIRS. Each record in the dataset corresponds to a specific teacher in a single AIRS year. This dataset contains 44,883 observations, although we focus on the subset of 34,562 observations for teachers who completed the ELA and/or mathematics pathway. When taking the AIRS, teachers are assigned to a pathway with questions that ask about a single subject (ELA, mathematics, or science) and grade band (elementary, middle, or high school). Respondents are assigned a subject and grade pathway based on a set of introductory questions that ask about their subject(s) and grade(s) taught in that school year. General elementary teachers are randomly assigned to either the ELA, mathematics, or science pathway. (For more details about how subject and grade pathways are assigned, see Doan et al., 2024.)

The same teacher in our analytic dataset might be observed up to six times (once each school year). However, because teachers are randomly assigned to a single subject and grade pathway, the same teacher might appear on different pathways. For example, an elementary teacher might be observed on the mathematics pathway in 2019 and again in 2021. But that same teacher might be observed again in 2022 on the ELA pathway.

In total, there are 19,661 unique teachers in our analytic dataset. We observed 8,089 teachers (or 41 percent) only once. Meanwhile, we observed 606 teachers (or 3 percent) in all six data years. We observed the remaining teachers multiple times.

## Analytic Approach

Throughout the report, we use several approaches to examine the relationship among IMPD membership and teacher HQIM usage and HQPL participation. Most commonly, we use a descriptive approach that simply presents survey-weighted means of teacher HQIM usage and HQPL participation, disaggregated by IMPD membership status. These are the predominant results shown in the main body of this report.

We conduct robustness analyses to assess whether the inferences drawn from these descriptives are comparable with other analytical strategies that address shortcomings with this descriptive approach. First, we use a regression approach to account for observed differences in the teacher samples in states that are versus have not ever been members of the IMPD Network. Table A.3 shows our teachers' person- and school-level demographic characteristics based on their state policy condition in 2019 (the first year we observed teachers in our analytic sample). As shown in Table A.3, there are some notable differences in our teacher samples. For example, both mathematics and ELA teachers in IMPD member states are more likely to be in rural schools and schools serving mostly White students. ELA teachers in IMPD states are more likely to teach elementary grades. These systematic differences may explain observed differences in outcomes across state policy conditions, especially if these person- and school-level characteristics are strongly correlated with teachers' likelihood of using HQIM or participating in HQPL. Said another way, some differences that we observe in teachers' usage of HQIM and participation in HQPL across states may be due to factors other than IMPD membership, such as the school setting in which these teachers teach.

**Table A.3. Teacher and School Demographic Characteristics of the AIRS 2024 Sample, by IMPD Cohort (Mathematics)**

|                                          |       |      |    | Mathematics     |       |          |             |             |
|------------------------------------------|-------|------|----|-----------------|-------|----------|-------------|-------------|
|                                          |       |      |    | IMDP Membership |       |          |             |             |
|                                          |       |      |    | Never           | Any   | Original | 2021 Joiner | 2023 Joiner |
| Characteristic                           |       |      |    |                 |       |          |             |             |
| Sex                                      |       |      |    |                 |       |          |             |             |
| Male                                     | 0.18  | 0.17 |    | 0.16            | 0.17  | 0.16     | 0.25        | 0.25        |
| Female                                   | 0.82  | 0.83 |    | 0.84            | 0.83  | 0.84     | 0.75        | 0.75        |
| Race/ethnicity                           |       |      |    |                 |       |          |             |             |
| White                                    | 0.79  |      |    | 0.80            | 0.69  | 0.74     | 0.83        | 0.91        |
| Black                                    | 0.05  |      |    | 0.07            | 0.09  | 0.00     | 0.04        | 0.02        |
| Hispanic                                 | 0.05  |      |    | 0.04            | 0.10  | 0.05     | 0.04        | 0.00        |
| Other                                    | 0.11  |      |    | 0.09            | 0.11  | 0.21     | 0.08        | 0.07        |
| Experience (years)                       | 15.14 |      | *  | 14.07           | 13.95 | 15.05    | 12.79       | 15.37       |
| Grades taught                            |       |      |    |                 |       |          |             |             |
| Elementary                               | 0.53  | 0.53 |    | 0.54            | 0.48  | 0.53     | 0.46        | 0.53        |
| Middle                                   | 0.22  | 0.26 | *  | 0.26            | 0.32  | 0.26     | 0.33        | 0.24        |
| High                                     | 0.24  | 0.20 | *  | 0.20            | 0.19  | 0.21     | 0.21        | 0.23        |
| School poverty status                    |       |      |    |                 |       |          |             |             |
| Low poverty                              | 0.46  | 0.46 |    | 0.40            | 0.42  | 0.63     | 0.63        | 0.78        |
| High poverty                             | 0.54  | 0.54 |    | 0.60            | 0.58  | 0.37     | 0.38        | 0.22        |
| School student racial/ethnic composition |       |      |    |                 |       |          |             |             |
| Majority SOC                             | 0.50  | 0.43 | ** | 0.43            | 0.59  | 0.68     | 0.58        | 0.43        |

| Characteristic         | Mathematics     |       |     |          |             |             |             |             |
|------------------------|-----------------|-------|-----|----------|-------------|-------------|-------------|-------------|
|                        | IMDP Membership |       |     |          |             |             |             |             |
|                        | Never           | Any   |     | Original | 2021 Joiner | 2023 Joiner | 2024 Joiner | 2021 Leaver |
| Majority white         | 0.50            | 0.57  | **  | 0.57     | 0.41        | 0.32        | 0.42        | 0.57        |
| School locale          |                 |       |     |          |             |             |             |             |
| Urban                  | 0.29            | 0.24  | *   | 0.22     | 0.39        | 0.05        | 0.25        | 0.30        |
| Suburban               | 0.41            | 0.34  | **  | 0.36     | 0.18        | 0.74        | 0.42        | 0.22        |
| Rural                  | 0.28            | 0.32  | *** | 0.32     | 0.30        | 0.05        | 0.17        | 0.43        |
| School enrollment size |                 |       |     |          |             |             |             |             |
| Small                  | 0.28            | 0.32  | *   | 0.32     | 0.30        | 0.05        | 0.17        | 0.43        |
| Large                  | 0.72            | 0.68  | *   | 0.68     | 0.70        | 0.95        | 0.83        | 0.57        |
| <i>N</i>               | 748             | 1,279 |     | 1,021    | 99          | 19          | 24          | 116         |

NOTE: SOC = students of color. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

**Table A.4. Teacher and School Demographic Characteristics of the AIRS 2024 Sample, by IMPD Cohort (ELA)**

| Characteristic                           | ELA             |       |     |          |             |             |             |             |
|------------------------------------------|-----------------|-------|-----|----------|-------------|-------------|-------------|-------------|
|                                          | IMDP Membership |       |     |          |             |             |             | 2021 Leaver |
|                                          | Never           | Any   |     | Original | 2021 Joiner | 2023 Joiner | 2024 Joiner |             |
| Sex                                      |                 |       |     |          |             |             |             |             |
| Male                                     | 0.15            | 0.10  | **  | 0.10     | 0.13        | 0.00        | 0.10        | 0.12        |
| Female                                   | 0.85            | 0.90  | **  | 0.90     | 0.87        | 1.00        | 0.90        | 0.88        |
| Race/ethnicity                           |                 |       |     |          |             |             |             |             |
| White                                    | 0.75            | 0.78  |     | 0.78     | 0.67        | 0.93        | 0.86        | 0.89        |
| Black                                    | 0.05            | 0.06  |     | 0.07     | 0.07        | 0.07        | 0.00        | 0.02        |
| Hispanic                                 | 0.06            | 0.05  | *   | 0.04     | 0.13        | 0.00        | 0.00        | 0.02        |
| Other                                    | 0.14            | 0.11  |     | 0.11     | 0.12        | 0.00        | 0.14        | 0.07        |
| Experience (years)                       | 14.72           | 14.19 |     | 14.00    | 13.95       | 11.80       | 18.86       | 15.66       |
| Grades taught                            |                 |       |     |          |             |             |             |             |
| Elementary                               | 0.45            | 0.56  | *** | 0.57     | 0.50        | 0.80        | 0.48        | 0.49        |
| Middle                                   | 0.29            | 0.24  | **  | 0.23     | 0.29        | 0.07        | 0.19        | 0.26        |
| High                                     | 0.26            | 0.20  | **  | 0.20     | 0.21        | 0.13        | 0.33        | 0.25        |
| School poverty status                    |                 |       |     |          |             |             |             |             |
| Low poverty                              | 0.44            | 0.44  |     | 0.37     | 0.39        | 0.60        | 0.71        | 0.79        |
| High poverty                             | 0.56            | 0.56  |     | 0.63     | 0.61        | 0.40        | 0.29        | 0.21        |
| School student racial/ethnic composition |                 |       |     |          |             |             |             |             |
| Majority SOC                             | 0.51            | 0.42  | *** | 0.44     | 0.56        | 0.60        | 0.38        | 0.17        |

| Characteristic         | ELA             |       |     |          |             |             |             |             |
|------------------------|-----------------|-------|-----|----------|-------------|-------------|-------------|-------------|
|                        | IMDP Membership |       |     |          |             |             |             | 2021 Leaver |
|                        | Never           | Any   |     | Original | 2021 Joiner | 2023 Joiner | 2024 Joiner |             |
| Majority white         | 0.49            | 0.58  | *** | 0.56     | 0.44        | 0.40        | 0.62        | 0.83        |
| School locale          |                 |       |     |          |             |             |             |             |
| Urban                  | 0.34            | 0.24  | *** | 0.23     | 0.32        | 0.20        | 0.24        | 0.23        |
| Suburban               | 0.41            | 0.35  | **  | 0.36     | 0.35        | 0.73        | 0.24        | 0.28        |
| Rural                  | 0.25            | 0.41  | *** | 0.42     | 0.33        | 0.07        | 0.52        | 0.49        |
| School enrollment size |                 |       |     |          |             |             |             |             |
| Small                  | 0.24            | 0.33  | *** | 0.33     | 0.24        | 0.20        | 0.24        | 0.42        |
| Large                  | 0.76            | 0.67  | *** | 0.67     | 0.76        | 0.80        | 0.76        | 0.58        |
| <i>N</i>               | 877             | 1,543 |     | 1,229    | 140         | 15          | 21          | 138         |

NOTE: SOC = students of color. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

To mitigate these concerns, we then move to a regression framework. We estimate several different regression models. In this section, we briefly describe the specifications for the various regression models we run and how to interpret their results.

## Covariate-Adjusted Ordinary Least Squares

We first estimate basic linear regression models that take the form:

$$outcome_i = \beta_0 + \beta_1 activeIMPD_i + \beta_2 P_i + \beta_3 S_i + \varepsilon_i$$

where  $outcome_i$  represents our two outcomes of interest (usage of at least one HQIM and engagement in frequent HQPL for teacher  $i$ ).  $activeIMPD_i$  is a dummy variable that equals 1 if teacher  $i$  taught in a state that was a member of the IMPD Network during that survey year, and 0 if not. Meanwhile,  $P_i$  represents a vector of person-level characteristics (i.e., grades taught, gender, race/ethnicity, years of teaching experience) while  $S_i$  represents a vector of school-level characteristics (i.e., school enrollment size, locale, poverty status as proxied by the share of students eligible for free- or reduced-price lunch, and student racial/ethnic composition).  $\varepsilon_i$  is an error term.

Our choice of covariates in this analysis is informed by prior research conducted using the AIRS (Doan et al., 2022; Zuo, Doan, and Kaufman, 2023), which suggest that rates of HQIM use and HQPL participation are correlated with many of these background factors, particularly grades taught, school locale, and school poverty. The inclusion of these controls accounts for spurious relation that may occur if IMPD membership is also correlated with these same factors as the contents of Table A.3 suggest are the case. We do note that these covariates ultimately account for only a few factors that we suspect may be endogenous with respect to HQIM use and HQPL participation. In particular, we note that this model does not include measures on the quality of school, district, or state-level leadership or district- or state-level policy environment that may affect the outcomes of interest. Therefore, we note that this covariate-adjusted analysis, while accounting for a number of known confounders, is ultimately descriptive in nature and encourage readers to interpret the results as such.

$\beta_1$  is the coefficient of interest and captures differences between IMPD Network and non-Network states in teachers' likelihood of reporting our outcomes of interest, adjusting for observed differences in the teacher populations and the schools they taught in. Estimation of these models helps us answer the question, "Is the effect of IMPD membership on teachers' use of HQPL or participation in HQPL the same in each survey year?"

We estimate this model separately by subject (mathematics and ELA) and year (2019 to 2024) for each of our two outcomes. We use linear models—as opposed to logit or probit models—for ease of interpretation. We include survey weights. We first estimate these models for the entirety of our survey sample, totaling 24 regression models.

## Regression with Propensity Score Weighting

We also test the robustness of our estimates using regression models that weigh respondents by their likelihood of being in an IMPD member state. First, we calculate each teacher's likelihood of

being in an IMPD member state as a function of their characteristics using the following regression model:

$$activeIMPD_i = \beta_0 + \beta_1 P_i + \beta_2 S_i + \varepsilon_i$$

where  $activeIMPD_i$  is a dummy variable that equals 1 if teacher  $i$  taught in a state that was a member of the IMPD Network during that survey year, and 0 if not. Meanwhile,  $P_i$  represents a vector of person-level characteristics (i.e., grades taught, gender, race/ethnicity, years of teaching experience) while  $S_i$  represents a vector of school-level characteristics (i.e., school enrollment size, locale, poverty status as proxied by the share of students eligible for free- or reduced-price lunch, and student racial/ethnic composition). According to guidance from Ridgeway et al. (2015), we include survey weights ( $s_i$ ) in this regression model. We estimate this model separately for each subject and survey year.

Second, we use these models to predict the probability of being in an IMPD member state in that survey year. This is each teacher's propensity score ( $\pi_i$ ). In the third step, we convert these propensity scores to weights. According to Greifer and Stuart (2021), we assign teachers in the IMPD Network states a propensity score weight ( $p_i$ ) =  $\frac{1}{\pi_i}$  and the teachers in non-IMPD Network states a propensity score weight ( $p_i$ ) =  $\frac{1}{1-\pi_i}$ .

One complication of this analysis is that our estimation needs to account for two sets of weights: both the propensity score weights, which differentially weight observations based on their probability of being in an IMPD member state, and the original survey weights, which weight observations to resemble the national population of K–12 teachers. According to guidance from Ridgeway et al. (2015), survey weights should be retained during the final model estimation. Therefore, to create a final weight ( $f_i$ ), we multiply the survey weight and the propensity score weight ( $f_i = s_i \times p_i$ ).

We then re-estimate the same linear regression models described previously, although this time we apply these revised weights that incorporate propensity scores. Again, we estimate models separately by subject (mathematics and ELA) and year (2019 to 2024) for each of our two outcomes. And we continue to use linear models for ease of interpretation.

## TWFE

Last, we use TWFE models a way to estimate associations between IMPD membership and HQIM use and HQPL participation that account for both state-specific effects and secular trends in both outcomes over time. Results from these models are listed in Tables 6.3 and 6.4. These TWFE models take the form:

$$outcome_{it} = \beta_0 + \beta_1 activeIMPD_{it} + \beta_2 P_{it} + \beta_3 S_{it} + \gamma_t + \alpha_i + \varepsilon_{it}$$

where  $outcome_{it}$  represents our two outcomes of interest (usage of at least one HQIM and participation in HQPL) for teacher  $i$  at time  $t$ .  $activeIMPD_{it}$  is a dummy variable that equals 1 if teacher  $i$  taught in a state at time  $t$  that was a member of the IMPD Network, and 0 if not. Meanwhile,  $P_{it}$  represents a vector of person-level characteristics (i.e., grades taught, gender,

race/ethnicity, years of teaching experience) while  $S_{it}$  represents a vector of school-level characteristics (i.e., school enrollment size, locale, poverty status as proxied by the share of students eligible for free- or reduced-price lunch, student racial/ethnic composition). Newly, our TWFE model includes fixed effects for year (2019 to 2024) and state. Time fixed effects ( $\gamma_t$ ) account for anything that might be different across time. For example, our study period spans the coronavirus disease 2019 pandemic period, in which we might expect our outcomes to look different across all states regardless of their IMPD Network status because of the pandemic. Meanwhile, our state fixed effects ( $\alpha_i$ ) account for differences across states (e.g., policies, practices beyond IMPD membership) that might be associated with our outcomes of interest.  $\varepsilon_i$  is an error term. Discussion of these results and limitations of this method are described in the main body of the report.

### Results from Covariate-Adjusted and Propensity Score Weighted Ordinary Least Squares Models

In Tables A.5 and A.6, we present the estimated associations using covariate-adjusted and propensity score weighted regressions between active IMPD membership and use of HQIM (Table A.5) and frequent participation in HQPL (Table A.6). Regressions are estimated separately for each year and subject.

Table A.5. Covariate-Adjusted and Propensity Score Weighted Results for Use of HQIM

| Year | Mathematics        |                           |                           | ELA                |                           |                           |
|------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|
|      | All IMPD States    |                           | Original IMPD States Only | All IMPD States    |                           | Original IMPD States Only |
|      | Covariate-Adjusted | Propensity Score Weighted | Covariate-Adjusted        | Covariate-Adjusted | Propensity Score Weighted | Covariate-Adjusted        |
|      | (1)                | (2)                       | (3)                       | (4)                | (5)                       | (6)                       |
| 2019 | 0.24***<br>(0.03)  | 0.25***<br>(0.03)         | 0.22***<br>(0.03)         | 0.15***<br>(0.02)  | 0.15***<br>(0.03)         | 0.21***<br>(0.03)         |
| 2020 | 0.13***<br>(0.03)  | 0.13***<br>(0.03)         | 0.09**<br>(0.03)          | 0.05*<br>(0.02)    | 0.06*<br>(0.03)           | 0.08**<br>(0.03)          |
| 2021 | -0.03<br>(0.03)    | -0.03<br>(0.03)           | 0.06*<br>(0.03)           | 0.07**<br>(0.02)   | 0.07**<br>(0.02)          | 0.11***<br>(0.02)         |
| 2022 | -0.05<br>(0.03)    | -0.04<br>(0.03)           | 0.10***<br>(0.03)         | 0.08**<br>(0.02)   | 0.09***<br>(0.02)         | 0.10***<br>(0.02)         |
| 2023 | -0.03<br>(0.03)    | -0.02<br>(0.03)           | 0.06*<br>(0.03)           | 0.05*<br>(0.02)    | 0.06*<br>(0.02)           | 0.13***<br>(0.02)         |
| 2024 | -0.02<br>(0.02)    | -0.02<br>(0.02)           | 0.12***<br>(0.02)         | 0.05*<br>(0.02)    | 0.05*<br>(0.02)           | 0.12***<br>(0.02)         |

NOTE: Coefficient on IMPD membership from regression comparing IMPD and non-IMPD states on use of HQIM. Standard errors appear in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

The findings from Table A.4 broadly conform with the findings from the descriptive analysis presented in Table 6.1. In ELA, we consistently observe a positive association between IMPD Network membership and teachers' usage of HQIM in all survey years. We observe this positive association regardless of model specification, although we observe the largest effects when we include propensity score weights. Depending on the year and model specification, effects typically range from 0.05 to 0.21, meaning that ELA teachers in active IMPD member states are somewhere between 5 to 21 percentage points more likely to use HQIM than their counterparts in non-IMPD member states. However, our results for mathematics vary depending on model specifications. We consistently find that mathematics teachers in IMPD network states were using HQIM at higher rates than their peers in 2019 and 2020, regardless of model specification. However, once the Network expanded in 2021, it is less clear to what extent IMPD membership is associated with use of HQIM. The effect of this relationship depends on how we specify the model. Using covariate adjustment, we find no statistically significant relationships between IMPD membership and use of mathematics HQIM from 2021 to 2024. However, models that focus solely on those states that were original members of the IMPD Network suggest that teachers were significantly more likely to use mathematics HQIM in those years than their peers.

Table A.6. Covariate-Adjusted and Propensity Score Weighted Results for Participation in HQPL

| Year | Mathematics        |                           |                           | ELA                |                           |                           |
|------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|
|      | All IMPD States    |                           | Original IMPD States Only | All IMPD States    |                           | Original IMPD States Only |
|      | Covariate-Adjusted | Propensity Score Weighted | Covariate-Adjusted        | Covariate-Adjusted | Propensity Score Weighted | Covariate-Adjusted        |
|      | (1)                | (2)                       | (3)                       | (4)                | (5)                       | (6)                       |
| 2019 | 0.04<br>(0.03)     | 0.06*<br>(0.03)           | 0.07*<br>(0.04)           | 0.06*<br>(0.03)    | 0.08**<br>(0.03)          | 0.08*<br>(0.03)           |
| 2020 | 0.02<br>(0.03)     | 0.01<br>(0.03)            | 0.01<br>(0.03)            | 0.09**<br>(0.03)   | 0.07**<br>(0.03)          | 0.10**<br>(0.03)          |
| 2021 | 0.08**<br>(0.03)   | 0.08**<br>(0.03)          | 0.07*<br>(0.03)           | 0.06*<br>(0.03)    | 0.06*<br>(0.03)           | 0.10***<br>(0.03)         |
| 2022 | 0.00<br>(0.03)     | −0.00<br>(0.03)           | 0.00<br>(0.03)            | 0.04<br>(0.02)     | 0.04*<br>(0.02)           | 0.05*<br>(0.02)           |
| 2023 | 0.11***<br>(0.03)  | 0.10***<br>(0.02)         | 0.08**<br>(0.03)          | 0.05*<br>(0.02)    | 0.06**<br>(0.02)          | 0.02<br>(0.02)            |
| 2024 | 0.03<br>(0.02)     | 0.04<br>(0.02)            | 0.07**<br>(0.02)          | 0.01<br>(0.02)     | 0.01<br>(0.02)            | 0.06**<br>(0.02)          |

NOTE: Coefficient on IMPD membership from regression comparing IMPD and non-IMPD states on participation in HQPL. Standard errors appear in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

In Table A.7, which shows yearly associations between IMPD membership and teachers' *frequent participation* (defined as participation at least four to six times per year) in HQPL, we find that while teachers in IMPD states were consistently more likely to report frequently participating in HQPL than their peers, the extent to which these differences were statistically significant depended on year and modeling specification. In mathematics, regardless of model specification, we observe statistically significant positive associations between IMPD membership and mathematics teachers' participation in frequent HQPL learning in 2021 and 2023. In ELA, all model specifications find that teachers in IMPD states were significantly more likely to frequently participate in HQPL between 2019 and 2021, although statistical significance at the  $p < 0.05$  level between 2022 and 2024 varied across model specifications.

## Additional Tables

**Table A.7. IMPD State-Level Data on Percentage of Teachers Who Report Use of HQIM and Frequent Participation in HQPL, by Year and Subject**

| State | Indicator             | Subject | Year |      |      |      |      |      |
|-------|-----------------------|---------|------|------|------|------|------|------|
|       |                       |         | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| AR    | Use of HQIM           | ELA     |      |      | 18   | 39   | 39   | 51   |
| AR    |                       | Math    |      |      | 53   | 60   | 67   | 73   |
| AR    | Participation in HQPL | ELA     |      |      | 52   | 80   | 81   | 77   |
| AR    |                       | Math    |      |      | 61   | 75   | 81   | 78   |
| DE    | Use of HQIM           | ELA     | 11   | 19   | 31   | 35   | 47   | 64   |
| DE    |                       | Math    | 56   | 59   | 57   | 65   | 71   | 69   |
| DE    | Participation in HQPL | ELA     | 68   | 83   | 73   | 85   | 83   | 84   |
| DE    |                       | Math    | 72   | 74   | 63   | 76   | 77   | 79   |
| KY    | Use of HQIM           | ELA     |      |      | 30   | 28   | 33   | 50   |
| KY    |                       | Math    |      |      | 45   | 52   | 54   | 61   |
| KY    | Participation in HQPL | ELA     |      |      | 54   | 72   | 75   | 69   |
| KY    |                       | Math    |      |      | 48   | 71   | 60   | 70   |
| LA    | Use of HQIM           | ELA     | 60   | 63   | 52   | 57   | 63   | 72   |
| LA    |                       | Math    | 83   | 70   | 60   | 68   | 67   | 79   |
| LA    | Participation in HQPL | ELA     | 80   | 68   | 62   | 73   | 73   | 77   |
| LA    |                       | Math    | 65   | 64   | 60   | 73   | 61   | 74   |
| MA    | Use of HQIM           | ELA     | 9    | 17   | 16   | 16   | 21   | 28   |
| MA    |                       | Math    | 25   | 35   | 37   | 51   | 55   | 65   |

| State | Indicator             | Subject | Year |      |      |      |      |      |
|-------|-----------------------|---------|------|------|------|------|------|------|
|       |                       |         | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| MA    | Participation in HQPL | ELA     | 57   | 55   | 50   | 79   | 72   | 71   |
| MA    |                       | Math    | 43   | 53   | 42   | 72   | 69   | 70   |
| MD    | Use of HQIM           | ELA     |      |      |      |      | 52   | 55   |
| MD    |                       | Math    |      |      |      |      | 68   | 70   |
| MD    | Participation in HQPL | ELA     |      |      |      |      | 81   | 79   |
| MD    |                       | Math    |      |      |      |      | 70   | 75   |
| MS    | Use of HQIM           | ELA     | 21   | 25   | 31   | 39   | 42   | 54   |
| MS    |                       | Math    | 42   | 59   | 50   | 63   | 49   | 61   |
| MS    | Participation in HQPL | ELA     | 61   | 67   | 56   | 71   | 77   | 73   |
| MS    |                       | Math    | 59   | 66   | 57   | 70   | 70   | 75   |
| NE    | Use of HQIM           | ELA     | 5    | 13   | 17   | 30   | 41   | 54   |
| NE    |                       | Math    | 20   | 22   | 34   | 40   | 53   | 59   |
| NE    | Participation in HQPL | ELA     | 46   | 49   | 58   | 70   | 70   | 64   |
| NE    |                       | Math    | 52   | 54   | 36   | 62   | 53   | 49   |
| NM    | Use of HQIM           | ELA     | 35   | 45   | 31   | 43   | 53   | 63   |
| NM    |                       | Math    | 44   | 45   | 53   | 66   | 67   | 71   |
| NM    | Participation in HQPL | ELA     | 58   | 55   | 54   | 72   | 77   | 78   |
| NM    |                       | Math    | 55   | 61   | 64   | 69   | 71   | 70   |
| OH    | Use of HQIM           | ELA     |      |      | 23   | 30   | 29   | 34   |
| OH    |                       | Math    |      |      | 43   | 51   | 59   | 66   |
| OH    | Participation in HQPL | ELA     |      |      | 40   | 61   | 63   | 53   |
| OH    |                       | Math    |      |      | 38   | 62   | 72   | 57   |
| RI    | Use of HQIM           | ELA     | 31   | 41   | 49   | 67   | 68   | 77   |
| RI    |                       | Math    | 39   | 64   | 63   | 61   | 72   | 81   |

| State | Indicator             | Subject | Year |      |      |      |      |      |
|-------|-----------------------|---------|------|------|------|------|------|------|
|       |                       |         | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| RI    | Participation in HQPL | ELA     | 52   | 67   | 57   | 80   | 70   | 72   |
| RI    |                       | Math    | 52   | 48   | 55   | 84   | 71   | 69   |
| TN    | Use of HQIM           | ELA     | 23   | 32   | 46   | 61   | 65   | 60   |
| TN    |                       | Math    | 45   | 57   | 53   | 56   | 50   | 60   |
| TN    | Participation in HQPL | ELA     | 70   | 80   | 62   | 83   | 76   | 76   |
| TN    |                       | Math    | 61   | 66   | 54   | 74   | 66   | 74   |
| TX    | Use of HQIM           | ELA     |      |      | 36   | 43   | 33   | 47   |
| TX    |                       | Math    |      |      | 24   | 29   | 36   | 40   |
| TX    | Participation in HQPL | ELA     |      |      | 54   | 83   | 79   | 78   |
| TX    |                       | Math    |      |      | 58   | 78   | 79   | 73   |
| VA    | Use of HQIM           | ELA     |      |      |      |      |      | 30   |
| VA    |                       | Math    |      |      |      |      |      | 36   |
| VA    | Participation in HQPL | ELA     |      |      |      |      |      | 63   |
| VA    |                       | Math    |      |      |      |      |      | 69   |
| WI    | Use of HQIM           | ELA     | 5    | 13   | 16   |      |      |      |
| WI    |                       | Math    | 51   | 49   | 49   |      |      |      |
| WI    | Participation in HQPL | ELA     | 57   | 71   | 57   |      |      |      |
| WI    |                       | Math    | 49   | 55   | 48   |      |      |      |

# HQIM Policy Scan

In this appendix, we provide further description for the 11 state-level HQIM policies that we coded as part of our policy scan analysis.

## Instructional Material Policies

### 1. State Recommends or Rates Instructional Materials (IM1)

We identify whether states provide any official signal, in the form of recommendations or ratings, to schools and districts about which instructional materials are approved by the state or otherwise designated as *standards-aligned* or *high quality*. The nature of how states provide these recommendations or ratings may differ. Certain states formally adopt instructional materials through regular, state-led review cycles. For example, Tennessee state statute requires the state Textbook and Instructional Materials Quality Commission to cyclically review materials and recommend an official list for approval by the Tennessee Department of Education. Local districts can then select their materials from the approved list, and deviating from the list requires a waiver. Other states provide extensive ratings and designations of the quality of specific instructional materials but otherwise do not provide a formal recommendation of the use of a given material. One such state is Texas, which provides a list of reviewed instructional materials, but statute allows districts with the authority to select their own materials whether or not the materials are on the list. On the other hand, other states' statutes, such as that of Wyoming, explicitly forbid their state departments of education from prescribing textbooks or curriculum.

### 2. State Collects Data from Districts on Adoption of Instructional Materials (IM2)

We identify whether states collect and monitor which instructional materials districts have adopted. Data collections can be voluntary or mandatory in nature. For example, the Oregon Department of Education conducts statewide instructional materials data collection. Additionally, states may opt to publicly post adoption data or gather data only for internal use. For example, Ohio collects this information but does not share it publicly, while Alaska maintains a publicly available database listing all adopted materials in each district across the state.

### 3. State Provides Guidance on Selection of Instructional Materials (IM3)

We identify whether states provide guidance to schools and districts on how to select instructional materials in the form of trainings or asynchronous materials (e.g., rubrics). Although often co-occurring, we consider the provision of guidance for the selection of materials to be distinct from the recommendation or rating of specific materials. In our coding, we found that among states that do provide guidance on material selection, some states do so by developing their own homegrown guidance in the form of state-generated rubrics, webinars, among others, while other states simply provide links to preexisting resources, such as EdReports, on their instructional materials webpages. However, many states offer both. For example, Illinois provides specific guidelines for the process by which local districts should review and select materials, and the resources provided for the process include both state-generated curriculum evaluation tools and links to such external resources as EdReports.

### 4. State Requires Districts to Use Approved Instructional Materials (IM4)

We identify whether states require districts to use approved instructional materials. States often include requirements that adopted textbooks be broadly aligned to state standards or include or exclude specific content, such as state history. However, relatively few states require districts to use specific instructional materials. Our coding suggests that just nine states require the use of approved materials. Two of those states—South Carolina and Alabama—offer no exceptions for schools receiving public funding. The remainder of the states—Florida, Hawaii, Nevada, New Mexico, Oklahoma, Rhode Island, and Tennessee—have a waiver process in place for districts requesting to use materials that are not on the approved list.

### 5. State Provides Funding for Adoption of Approved Instructional Materials (IM5)

We identify whether states provide funding for districts to adopt approved instructional materials. There are two broad types of policies that we coded as “yes” in this area. First, we included any state that provided grants for districts to adopt specific instructional materials. Some of these states have specific HQIM grants, while others outlined how ESSER funding could be used to purchase HQIM. Second, some states provide districts funds that are specifically designated to purchase textbooks. States that stipulate that these funds can be used only on approved instructional materials were coded as providing funding. Some of these states provide specific per-pupil dollar amounts that will be provided to each district solely for the purpose of textbooks, such as \$75 per pupil in Alabama or \$58.25 per pupil in New York.

## **6. State Provides Districts with Negotiated Prices for Instructional Materials (IM6)**

We identify whether states provide districts with state-negotiated prices for approved instructional materials. For example, Idaho provides state-negotiated prices for all materials on their state-approved list. These prices remain fixed for the duration of the state's six year adoption cycle. We do not consider states that include reference to instructional materials being sold at "minimum wholesale price" as states that have negotiated prices for specific materials.

## **PL Policies**

### **1. State Includes Alignment to Instructional Materials in Definition of High-Quality PL (PL1)**

We consider the extent to which states include alignment to instructional materials as a criterion for HQPL for their teachers. Many states do not offer a publicly available definition of what constitutes HQPL and were coded as "no" in this area. Conversely, some states publicize their definitions of HQPL in different ways, from formalized state statutes to less formal webpages. One prime example is New Jersey's state regulation, which states, "Professional learning results in equitable opportunities and excellent outcomes for all students when educators prioritize high-quality curriculum and instructional materials for students, assess student learning, and understand curriculum and implement through instruction" (New Jersey Administrative Code, Title 6A, Chapter 9C, 2023).

### **2. State Identifies Specific Standards-Based or Curriculum-Based PL Providers (PL2)**

We code whether states identified specific standards-based or curriculum-based PL providers for district selection. States created identified standards-based or curriculum-based PL providers in a variety of ways, including the development of vendor marketplaces to help districts connect with HQPL. For example, Louisiana created its own state Professional Learning Partner Guide to identify curriculum-based PL programs to teachers, whereas Kentucky has listed its Professional Learning Modules aligned to its state standards as a PL resource.

### **3. State or Regional Organizations Provide Standards-Based or Curriculum-Based PL (PL3)**

Similarly, we code for whether state or regional organizations provided standards-based or curriculum-based PL. To be included, states or state-adjacent entities (i.e., regional or educational cooperatives) must provide standards-based or curriculum-based PL through partnerships with a PL provider or through independent state resources. As an example of standards-based PL, Vermont has

a Professional Learning Network that is a statewide system providing HQPL on such topics as Common Core and collaborative learning. For curriculum-based PL, Massachusetts provides its own state-led PL called IMplement MA: Evaluate and Select High-Quality Instructional Materials Network, which provides differentiated virtual sessions with personalized support to engage district teams in the implementation process of HQIM.

#### **4. State Provides Funding for Standards-Based or Curriculum-Based PL (PL4)**

Last, we code for whether states provided funding for districts to purchase standards-based or curriculum-based PL. Some states provide one-time funds to a cohort of pilot district and schools for PL, while other states have reoccurring funding for PL through legislation. For example, Rhode Island has allocated a portion of ESSER funds to provide teachers curriculum-based, mathematics PL in elementary and middle schools, whereas Kentucky offers states the opportunity to apply for competitive grants to fund curriculum-based PL for mathematics instruction in grades K–3.

### **Educator Preparation Policies**

#### **1. State Includes Use of Instructional Materials in Standards for EPPs (EP1)**

We code for the extent to which states require EPPs to provide training in the selection and use of instructional materials. Among the states we identified as having such a policy, the requirements ranged from referencing external standards, to referencing curriculum and instructional materials generally, to explicitly requiring training in the selection and use of HQIM. Some states, such as Alabama and Arizona, reference the 2013 Interstate Teacher Assessment and Support Consortium (InTASC) standards, of which Standard 4(f) states, “The teacher evaluates and modifies instructional resources and curriculum materials for their comprehensiveness, accuracy for representing particular concepts in the discipline, and appropriateness for his/her learners” (CCSSO, undated-c). Other states, such as Connecticut and North Carolina, indirectly reference InTASC by requiring EPPs to adhere to the standards from the Council for the Accreditation of Educator Preparation, which in turn reference the InTASC standards. Other states, such as Missouri and New York, require EPPs to include training in the selection or use of materials generally, usually with reference to being aligned with state standards. Finally, several states, such as Louisiana and New Mexico, explicitly require EPPs to train educator candidates in the selection and use of HQIM.

### **State Policy Coding**

We report state codes for general HQIM policy (Table B.1) and Science of Reading—or elementary grades reading and literacy—HQIM policy (Table B.2). Each table uses shorthand labels for each code (e.g., IM1, PL1) as described previously. We provide the sources we referenced to code each state in a separate annex.

Table B.1. General HQIM Policy State Coding

| State           | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | PL1 | PL2 | PL3 | PL4 | EP1 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IMPD states     |     |     |     |     |     |     |     |     |     |     |     |
| AR              | X   |     | X   |     | X   |     |     | X   | X   |     | X   |
| DE              | X   | X   |     |     |     |     |     | X   |     | X   | X   |
| KY              |     |     | X   |     |     |     | X   | X   | X   | X   |     |
| LA              | X   |     | X   |     | X   | X   | X   | X   |     | X   | X   |
| MA              | X   | X   | X   |     | X   | X   |     | X   |     | X   | X   |
| MD              | X   |     | X   |     |     |     |     |     |     |     |     |
| MS              | X   |     | X   |     | X   | X   |     | X   |     | X   | X   |
| NE              | X   | X   | X   |     | X   |     | X   | X   |     | X   |     |
| NM              | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |
| OH              | X   | X   | X   |     | X   |     | X   | X   |     | X   | X   |
| RI              | X   | X   | X   | X   | X   | X   |     | X   | X   | X   |     |
| TN              | X   | X   | X   | X   | X   | X   |     |     |     |     |     |
| TX              | X   | X   |     |     | X   | X   | X   | X   | X   | X   | X   |
| VA              | X   |     | X   |     |     |     |     | X   | X   |     | X   |
| Non-IMPD states |     |     |     |     |     |     |     |     |     |     |     |
| AK              | X   | X   | X   |     |     |     |     |     |     |     |     |
| AL              | X   | X   | X   | X   | X   | X   | X   | X   |     |     |     |
| AZ              |     |     |     |     |     |     |     |     | X   |     |     |
| CA              | X   |     | X   |     |     |     |     |     |     |     | X   |
| CO              | X   |     |     |     | X   |     |     |     | X   |     | X   |
| CT              | X   |     |     |     |     |     |     |     |     |     |     |
| DC              | X   |     | X   |     | X   |     |     | X   | X   | X   |     |
| FL              | X   | X   | X   | X   | X   | X   | X   |     |     |     | X   |
| GA              |     |     |     |     |     |     |     | X   | X   |     | X   |
| HI              | X   |     |     | X   |     |     |     | X   |     |     |     |
| IA              | X   |     |     |     |     |     |     | X   |     |     |     |
| ID              | X   |     | X   |     |     | X   |     |     |     |     |     |
| IL              |     |     | X   |     |     |     |     | X   | X   |     | X   |

| State | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | PL1 | PL2 | PL3 | PL4 | EP1 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IN    |     |     |     |     |     |     |     | X   | X   |     | X   |
| KS    |     |     | X   |     |     |     |     |     | X   | X   |     |
| ME    | X   |     |     |     |     |     |     |     | X   |     |     |
| MI    |     |     |     |     |     |     |     |     |     |     |     |
| MN    |     |     |     |     |     |     |     |     |     |     |     |
| MO    |     |     |     |     |     |     |     | X   |     |     | X   |
| MT    | X   |     | X   |     |     |     |     | X   | X   |     |     |
| NC    | X   |     |     |     |     | X   |     | X   | X   |     |     |
| ND    |     |     |     |     |     |     |     | X   | X   |     |     |
| NH    |     |     |     |     |     |     |     | X   | X   |     | X   |
| NJ    |     |     | X   |     |     |     | X   |     |     |     |     |
| NV    | X   |     | X   | X   |     | X   |     |     |     | X   |     |
| NY    |     |     | X   |     | X   |     |     |     | X   |     | X   |
| OK    | X   | X   | X   | X   |     | X   |     |     | X   | X   |     |
| OR    | X   | X   | X   |     | X   |     |     |     | X   |     |     |
| PA    |     |     |     |     |     |     |     | X   |     |     | X   |
| SC    | X   |     | X   | X   | X   | X   |     |     |     |     |     |
| SD    |     |     | X   |     |     |     |     | X   | X   |     |     |
| UT    | X   |     | X   |     |     | X   |     |     |     | X   |     |
| VT    |     |     |     |     |     |     |     | X   | X   |     |     |
| WA    |     | X   | X   |     |     |     |     | X   | X   | X   |     |
| WI    |     | X   |     |     | X   |     | X   |     |     | X   |     |
| WV    | X   | X   | X   |     |     |     |     |     | X   | X   |     |
| WY    |     | X   |     |     |     |     |     |     |     |     |     |

NOTE: AK = Alaska; AL = Alabama; AZ = Arizona; CA = California; CO = Colorado; CT = Connecticut; DC = District of Columbia; GA = Georgia; HI = Hawaii; IA = Iowa; ID = Idaho; IL = Illinois; IN = Indiana; KS = Kansas; ME = Maine; MI = Michigan; MN = Minnesota; MO = Missouri; MT = Montana; NC = North Carolina; ND = North Dakota; NH = New Hampshire; NJ = New Jersey; NV = Nevada; OK = Oklahoma; OR = Oregon; PA = Pennsylvania; SC = South Carolina; SD = South Dakota; UT = Utah; VT = Vermont; WV = West Virginia; WY = Wyoming.

Table B.2. Science of Reading HQIM Policy State Coding

| State           | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | PL1 | PL2 | PL3 | PL4 | EP1 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IMPD states     |     |     |     |     |     |     |     |     |     |     |     |
| AR              | X   |     | X   | X   | X   |     |     | X   | X   |     | X   |
| DE              | X   | X   |     |     |     |     | X   | X   | X   | X   | X   |
| KY              |     |     | X   |     | X   |     | X   |     | X   |     |     |
| LA              | X   |     | X   |     | X   | X   | X   | X   |     | X   | X   |
| MA              | X   | X   | X   |     | X   | X   |     | X   | X   | X   | X   |
| MD              | X   |     | X   |     | X   |     |     | X   | X   | X   |     |
| MS              | X   |     | X   |     | X   | X   |     | X   | X   | X   | X   |
| NE              | X   | X   | X   |     | X   |     | X   | X   | X   |     |     |
| NM              | X   | X   | X   | X   | X   | X   | X   | X   | X   |     | X   |
| OH              | X   | X   | X   |     | X   |     | X   | X   | X   | X   | X   |
| RI              | X   | X   | X   | X   | X   | X   |     | X   | X   | X   |     |
| TN              | X   | X   | X   | X   | X   | X   |     | X   | X   | X   |     |
| TX              | X   | X   |     | X   | X   | X   | X   |     |     |     | X   |
| VA              | X   |     | X   |     |     |     |     | X   | X   | X   | X   |
| Non-IMPD states |     |     |     |     |     |     |     |     |     |     |     |
| AK              | X   |     | X   |     | X   |     |     | X   | X   |     |     |
| AL              | X   | X   | X   | X   | X   | X   | X   |     | X   | X   |     |
| AZ              | X   | X   |     |     | X   |     | X   | X   | X   | X   |     |
| CA              | X   |     |     |     |     |     |     |     | X   |     | X   |
| CO              | X   | X   |     |     | X   |     | X   | X   | X   | X   | X   |
| CT              | X   |     |     | X   | X   |     |     | X   | X   | X   |     |
| DC              | X   |     | X   |     | X   |     |     | X   | X   | X   |     |
| FL              | X   | X   | X   |     | X   | X   | X   | X   | X   |     | X   |
| GA              |     |     |     |     |     |     |     | X   | X   |     | X   |
| HI              | X   |     |     | X   |     |     |     | X   |     |     |     |
| IA              | X   |     |     |     |     |     |     | X   | X   |     |     |
| ID              | X   |     | X   |     |     | X   |     |     | X   |     |     |
| IL              |     |     | X   |     |     |     |     |     |     |     | X   |

| State | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | PL1 | PL2 | PL3 | PL4 | EP1 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IN    |     |     |     |     | X   |     | X   | X   | X   |     | X   |
| KS    |     |     | X   |     |     |     |     |     | X   |     |     |
| ME    | X   |     |     |     |     |     |     | X   | X   |     |     |
| MI    |     | X   |     |     |     |     |     | X   | X   | X   |     |
| MN    | X   | X   |     |     | X   |     |     | X   | X   | X   |     |
| MO    | X   |     | X   |     | X   |     |     |     | X   | X   | X   |
| MT    | X   |     | X   |     |     |     |     | X   | X   |     |     |
| NC    | X   |     |     |     |     | X   |     | X   | X   |     |     |
| ND    | X   | X   | X   |     | X   |     |     | X   | X   | X   |     |
| NH    |     |     |     |     | X   |     |     | X   | X   | X   | X   |
| NJ    |     |     | X   |     |     |     | X   | X   | X   |     |     |
| NV    | X   |     | X   | X   |     | X   |     |     |     |     |     |
| NY    |     |     | X   |     |     |     |     | X   | X   |     | X   |
| OK    | X   | X   | X   | X   |     | X   |     | X   | X   |     |     |
| OR    | X   | X   | X   |     | X   |     |     | X   | X   |     |     |
| PA    |     |     |     |     |     |     |     | X   | X   |     | X   |
| SC    | X   |     | X   | X   | X   | X   |     | X   | X   | X   |     |
| SD    |     |     | X   |     |     |     |     | X   | X   |     |     |
| UT    | X   |     | X   |     |     | X   |     | X   | X   | X   |     |
| VT    |     |     |     |     |     |     |     | X   | X   |     |     |
| WA    |     | X   | X   |     |     |     |     |     |     |     |     |
| WI    |     | X   |     |     | X   |     | X   |     |     |     |     |
| WV    | X   | X   | X   |     |     |     |     |     |     |     |     |
| WY    |     | X   |     |     | X   |     |     | X   | X   |     |     |

# **Interview, Observation, and Artifact Data and Methods**

## **Interviews with IMPD Hub Staff and Coaches**

We conducted interviews with IMPD hub staff members in the first (2022–2023) and third (2024–2025) years of the study and annual interviews with IMPD coaches. We asked both groups about the design and implementation of network activities and how network activities changed over time. We also asked coaches about their state teams' progress with instructional materials policy, including the facilitators and impediments their teams experienced during the periods between interviews.

## **Interviews with SEA Leaders from IMPD and Non-IMPD States**

In addition to annual interviews with IMPD coaches, we conducted annual interviews with key team members from each network member SEA. IMPD hub staff members and coaches provided the names and contact information for the SEA staff and leaders most engaged with HQIM work and IMPD Network activities. The number of SEA leaders we interviewed per state per year varied across states depending on staff availability and team composition, but generally, we interviewed two to three individuals per state per year. Each IMPD Network state's organizational structure and job title differ, but our interviewees generally represented senior roles related to instructional materials work in their agency. They held such titles as CAO, deputy secretary over teaching and learning, and assistant commissioner. These interviews covered SEA policies and efforts toward HQIM goals, challenges and facilitators to this work, and feedback on IMPD Network activities.

In study year 2, we conducted interviews with SEA leaders from non-IMPD states. We used publicly available information to identify individuals in their states' CAOs (or equivalent) position, then reached out by email to invite those individuals to participate. We sent interview invitations to leaders from 36 states across the United States. Six state leaders participated in interviews. We asked state leaders about the priorities and goals for their SEA, their states' vision for curriculum and instruction, their states' role in recommending instructional materials to districts.

## **Interviews with District Leaders**

We interviewed district leaders from IMPD and non-IMPD states. We used several strategies to generate a convenience sample: We gathered publicly available contact information by scraping district websites around the United States and stratified our outreach to attempt to recruit leaders from

urban, suburban, and rural locales. To supplement our cold outreach, we used snowball sampling, inviting SEA leaders and professional contacts to pass along interview invitations to district leaders. Our overall sample consisted of 64 district leaders from 24 states. The district leaders in our interview sample held various titles and positions within their districts, but all were involved in their district's curriculum and instruction decisionmaking. We conducted one-time interviews with district leaders that were approximately one hour in length.

We note that this interview sample is not nationally representative and does not necessarily represent the breadth of experiences and perspectives of district leaders around the United States. However, these interviews provide valuable insights into district processes for selecting instructional materials and PL opportunities and the extent to which state resources inform these processes.

## Analytic Approach for Interview Analysis

Following transcription, we coded all interviews using a deductive coding scheme composed of descriptive, analytic, and inferential codes based on constructs of interest, drawn from the functional arrangements of the IMPD and our review of the literature on SEA policymaking, organizational capacity, and capacity building. After achieving inter-coder reliability, a coding team used Dedoose coding software to code all transcripts, meeting regularly to discuss code application, resolve questions, and maintain consistent internal understanding.

Following first-phase coding, we completed structured case narrative outlines, combining interview data from multiple respondents for each state and examining patterns across years. We used interviews with Network coaches and SEA leads to summarize state context, the strategies employed by the state to achieve HQIM-related goals, policy progress, each state's capacity to achieve HQIM goals, and the facilitators and barriers to the work. We updated each state's case annually to understand changes over time. We then conducted cross-case analysis to identify commonalities and variation across states. Where appropriate, we also triangulated findings from these analyses with those from other data sources, such as the policy scan or document review.

We use a subset of deductive codes to analyze interviews with district leaders. Unlike the state interviews, we treated each district interview as a single observation. We explored districts' policies regarding instructional materials; districts' processes for selecting, adopting, and implementing instructional materials; and districts' interactions with their SEAs. We looked for variation and similarities across districts.

We used interviews with IMPD hub staff members to inform our contextual understanding of the IMPD Network and our description of network activities. Given the small number of interviews with IMPD hub staff members and SEA leaders from non-IMPD states, we opted to conduct thematic analyses of these interviews.

## IMPD Coaching Observations

We conducted nonparticipant observations of coaching sessions involving IMPD state teams and their IMPD coaches, which took place over the course of three convenings. We conducted nonparticipant observations, taking structured field notes that included transcription of key

discussions and summary of tools, protocols, and supports in place. These notes were then coded according to aspects of the coach's role, the strategies and tools used during the session, and the content covered. We then analyzed these observations using cross-case meta-matrices, treating each observation as a case, to examine pattern by state and across states, over time.

## IMPD Coach Reports

We analyze data obtained from IMPD coaches' monthly reports. IMPD coaches write monthly reports on their states that track (1) state progress toward IMPD policy goals and (2) state capacity to implement IMPD policy goals. Coaches rate states using a four-point scale (Green, Yellow, Orange, Red) on six categories of state progress (e.g., communicate and build allies, signal which materials are high quality) and four categories of state capacity (e.g., priority and alignment across the SEA, capacity to drive progress). Additionally, coaches provide open-ended text comments and highlight "big victories" and "big challenges" in each month's updates. We analyzed monthly coaching reports for all IMPD states from 2019 through 2024.

# Abbreviations

|        |                                                                   |
|--------|-------------------------------------------------------------------|
| AIRS   | American Instructional Resources Survey                           |
| ATP    | American Teacher Panel                                            |
| CAO    | chief academic officer                                            |
| CCSSO  | Council of Chief State School Officers                            |
| ELA    | English language arts                                             |
| EP     | educator preparation                                              |
| EPP    | educator preparation program                                      |
| ESSER  | Elementary and Secondary School Emergency Relief                  |
| HQIM   | high-quality instructional materials                              |
| HQPL   | high-quality professional learning                                |
| IM     | instructional materials                                           |
| IMPD   | High-Quality Instructional Materials and Professional Development |
| InTASC | Interstate Teacher Assessment and Support Consortium              |
| PL     | professional learning                                             |
| RPL    | Reimagining Professional Learning                                 |
| RQ     | research question                                                 |
| RSC    | regional service center                                           |
| SEA    | state educational agency                                          |
| TWFE   | two-way fixed effects                                             |

# References

- Bhatt, Rachana, and Cory Koedel, "Large-Scale Evaluations of Curricular Effectiveness: The Case of Elementary Mathematics in Indiana," *Educational Evaluation and Policy Analysis*, Vol. 34, No. 4, December 2012.
- Bush-Mecenas, S., and J. A. Marsh, "The DIVE Approach: Using Case-Ordered Meta-Matrices and Theory-Based Data Displays to Analyze Multiple Case Study Data," in Chad R. Lochmiller, ed., *Complementary Research Methods for Educational Leadership and Policy Studies*, Palgrave Macmillan, 2018.
- Bush-Mecenas, Susan, Ashley Woo, Stephani L. Wrabel, Sabrina Lee, and Brian Kim, *Building Organizational and Individual Capacities in State and Local Education Agencies: The First Five Years of the Center to Improve Social and Emotional Learning and School Safety*, RAND Corporation, RR-A1161-2, 2023. As of June 20, 2025:  
[https://www.rand.org/pubs/research\\_reports/RR1161-2.html](https://www.rand.org/pubs/research_reports/RR1161-2.html)
- CCSSO—See Council of Chief State School Officers.
- Childs, Joshua, and Jennifer Lin Russell, "Improving Low-Achieving Schools: Building State Capacity to Support School Improvement Through Race to the Top," *Urban Education*, Vol. 52, No. 2, 2017.
- Claussen, C., *Capacity Building for Organizational Effectiveness: Literature Review: The Journey of High Performance*, United Way of Calgary and Area, 2011.
- Cosner, S., "Building Organizational Capacity Through Trust," *Educational Administration Quarterly*, Vol. 45, No. 2, 2009.
- Council of Chief State School Officers, "Guidance for States on Supporting District Use of High-Quality Professional Learning Providers," undated-a. As of June 18, 2025:  
<https://drive.google.com/file/d/1FvJdsUnTeab1apY91z9QM6h0BLr0cg1W/view>
- Council of Chief State School Officers, "IMPD Network Resources for High-Quality Instructional Material Adoption," webpage, undated-b. As of June 18, 2025:  
<https://learning.ccsso.org/high-quality-instructional-materials-impd-resources>
- Council of Chief State School Officers, "InTASC Model Core Teaching Standards and Learning Progressions for Teachers," webpage, undated-c. As of July 10, 2025:  
<https://learning.ccsso.org/intasc-model-core-teaching-standards-and-learning-progressions-for-teachers>
- Council of Chief State School Officers, *An IMPD Policy Roadmap for States*, 2022. As of June 18, 2025:  
<https://753a0706.flowpaper.com/CCSSOIMPDPolicyRoadmap/#page=1>
- Cox, Kate, Stephen Jolly, Simon Van Der Staaij, and Christian Van Stolk, *Understanding the Drivers of Organisational Capacity*, RAND Corporation, RR-2189-SAATCHI, 2018. As of June 20, 2025:  
[https://www.rand.org/pubs/research\\_reports/RR2189.html](https://www.rand.org/pubs/research_reports/RR2189.html)
- CurriculumHQ, homepage, undated. As of April 21, 2025:  
<https://curriculumhq.org/>

- Doan, Sy, Joshua Eagan, David Grant, and Julia H. Kaufman, *American Instructional Resources Surveys: 2024 Technical Documentation and Survey Results*, RAND Corporation, RR-A134-24, 2024. As of February 23, 2025:  
[https://www.rand.org/pubs/research\\_reports/RRA134-24.html](https://www.rand.org/pubs/research_reports/RRA134-24.html)
- Doan, Sy, and Julia Kaufman, “What Role Do States Play in Selecting K–12 Textbooks?” *State Education Standard*, Vol. 24, No. 1, 2024.
- Doan, Sy, Julia H. Kaufman, Ashley Woo, Andrea Prado Tuma, Melissa Kay Diliberti, and Sabrina Lee, *How States Are Creating Conditions for Use of High-Quality Instructional Materials in K–12 Classrooms: Findings from the 2021 American Instructional Resources Survey*, RAND Corporation, RR-A134-13, 2022. As of February 14, 2025:  
[https://www.rand.org/pubs/research\\_reports/RRA134-13.html](https://www.rand.org/pubs/research_reports/RRA134-13.html)
- EdReports, “About Us,” webpage, undated. As of April 28, 2025:  
<https://www.edreports.org/about>
- Fernandez, Sergio, and Hal G. Rainey, “Managing Successful Organizational Change in the Public Sector,” in Robert F. Durant and Jennifer R. S. Durant, eds., *Debating Public Administration*, Routledge, 2017.
- Floden, Robert E., Margaret E. Goertz, and Jennifer O’Day, “Capacity Building in Systemic Reform,” *Phi Delta Kappan*, Vol. 77, No. 1, September 1995.
- Greifer, Noah, and Elizabeth A. Stuart, “Matching Methods for Confounder Adjustment: An Addition to the Epidemiologist’s Toolbox,” *Epidemiologic Reviews*, Vol. 43, No. 1, 2021.
- Hanna, Robert, *Seeing Beyond Silos: How State Education Agencies Spend Federal Education Dollars and Why*, Center for American Progress, June 2014.
- Howley, Caitlin, and Keith M. Sturges, “Building Capacity in State Education Agencies: Using Organizational Theory to Guide Technical Assistance,” *Journal of Organizational Theory in Education*, Vol. 3, No. 1, September 2018.
- Huffman, D., F. Lawrenz, K. Thomas, and L. Clarkson, “Collaborative Evaluation Communities in Urban Schools: A Model of Evaluation Capacity Building for STEM Education,” *New Directions for Evaluation*, Vol. 2006, No. 109, Spring 2006.
- Jacobsen, Rebecca, and Andrew Saultz, “Trends—Who Should Control Education?” *Public Opinion Quarterly*, Vol. 76, No. 2, Summer 2012.
- Jochim, Ashley, and Patrick J. Murphy, *The Capacity Challenge: What It Takes for State Education Agencies to Support School Improvement*, Center on Reinventing Public Education, 2013.
- Jones, Merrick L., “Sustainable Organizational Capacity Building: Is Organizational Learning a Key?” *International Journal of Human Resource Management*, Vol. 12, No. 1, 2001.
- Kaufman, Julia H., Sy Doan, and Maria-Paz Fernandez, *The Rise of Standards-Aligned Instructional Materials for U.S. K–12 Mathematics and English Language Arts Instruction: Findings from the 2021 American Instructional Resources Survey*, RAND Corporation, RR-A134-11, 2021. As of June 20, 2025:  
[https://www.rand.org/pubs/research\\_reports/RRA134-11.html](https://www.rand.org/pubs/research_reports/RRA134-11.html)

- Kaufman, Julia H., Elizabeth D. Steiner, and Matthew D. Baird, *Raising the Bar for K–12 Academics: Early Signals on How Louisiana’s Education Policy Strategies Are Working for Schools, Teachers, and Students*, RAND Corporation, RR-2303/2-BRAF, 2019. As of May 15, 2025: [https://www.rand.org/pubs/research\\_reports/RR2303z2.html](https://www.rand.org/pubs/research_reports/RR2303z2.html)
- Kaufman, Julia H., Lindsey E. Thompson, and V. Darleen Opfer, *Creating a Coherent System to Support Instruction Aligned with State Standards: Promising Practices of the Louisiana Department of Education*, RAND Corporation, RR-1613-HCT, 2016. As of June 20, 2025: [https://www.rand.org/pubs/research\\_reports/RR1613.html](https://www.rand.org/pubs/research_reports/RR1613.html)
- Kinghorn, M., and B. Levinger, *Organizational Capacity: An Enhanced Framework*, MOMENTUM Knowledge Accelerator, 2021.
- Koedel, Cory, Diyi Li, Morgan S. Polikoff, Tenice Hardaway, and Stephani L. Wrabel, “Mathematics Curriculum Effects on Student Achievement in California,” *AERA Open*, Vol. 3, No. 1, January–March 2017.
- Koedel, Cory, and Morgan S. Polikoff, “Big Bang for Just a Few Bucks: The Impact of Math Textbooks in California,” *Brookings: Evidence Speaks*, Vol. 2, No. 5, January 5, 2017.
- Miles, Matthew B., A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 4th ed., Sage Publications, 2020.
- Mintrop, Heinrich, and Tina Trujillo, “Corrective Action in Low Performing Schools: Lessons for NCLB Implementation from First-Generation Accountability Systems,” *Education Policy Analysis Archives*, Vol. 13, No. 48, 2005.
- Mitchell, Coral, and Larry Sackney, *Profound Improvement: Building Capacity for a Learning Community*, Swets & Zeitlinger, 2000.
- Moullin, Joanna C., Kelsey S. Dickson, Nicole A. Stadnick, Borsika Rabin, and Gregory A. Aarons, “Systematic Review of the Exploration, Preparation, Implementation, Sustainment (EPIS) Framework,” *Implementation Science*, Vol. 14, No. 1, January 2019.
- New Jersey Administrative Code, Title 6A, Chapter 9C, Professional Development, April 6, 2023.
- Polikoff, Morgan, *Beyond Standards: The Fragmentation of Education Governance and the Promise of Curriculum Reform*, Harvard Education Press, 2021.
- The Reading League, “Policymakers and State Education Agencies,” webpage, undated. As of April 21, 2025: <https://www.thereadingleague.org/compass/policymakers-and-state-education-agencies/>
- Ridgeway, Greg, Stephanie Ann Kovalchik, Beth Ann Griffin, and Mohammed U. Kabeto, “Propensity Score Analysis with Survey Weighted Data,” *Journal of Causal Inference*, Vol. 3, No. 2, 2015.
- Rogers, P. J., “Organizational Capacity Building: The Four Core Capacity Model,” slides, Institute for Human Services, Inc., 2014.
- Saldaña, Johnny, *The Coding Manual for Qualitative Researchers*, 4th ed., SAGE Publications, 2021.
- Smarick, Andy, and Juliet Squire, *The State Education Agency: At the Helm, Not the Oar*, Bellwether Education Partners and Thomas B. Fordham Institute, April 2014.
- Sobeck, Joanne, and Elizabeth Agius, “Organizational Capacity Building: Addressing a Research and Practice Gap,” *Evaluation and Program Planning*, Vol. 30, No. 3, August 2007.

- State Educational Technology Directors Association, "Digital Instructional Materials: Acquisition Policies for States," webpage, undated. As of April 21, 2025:  
<https://dmaps.setda.org/>
- Steiner, David, "Curriculum Policy," in Douglas Harris, ed., *Live Handbook of Education Policy Research*, Association for Education Finance and Policy, 2025.
- Sunderman, Gail, and Gary Orfield, "Domesticating a Revolution: No Child Left Behind Reforms and State Administrative Response," *Harvard Educational Review*, Vol. 76, No. 4, 2006.
- Tanenbaum, Courtney, Andrea Boyle, Cheryl Graczewski, Susanne James-Burdumy, Lisa Dragoset, and Kristen Hallgren, *State Capacity to Support School Turnaround*, Mathematica Policy Research, 2015.
- Tulley, Michael A., "A Descriptive Study of the Intents of State-Level Textbook Adoption Processes," *Educational Evaluation and Policy Analysis*, Vol. 7, No. 3, Autumn 1985.
- Warren, Patrick, and Paul Murphy, *Implementing the Common Core State Standards in California*, Public Policy Institute of California, 2014.
- Whinnery, Erin, Gerardo Silva-Padron, and Lauren Bloomquist, "State Information Request: Textbook Adoption Policies," webpage, 2022. As of April 21, 2025:  
<https://www.ecs.org/state-information-request-textbook-adoption-policies/>
- Zuo, George, Sy Doan, and Julia H. Kaufman, *How Do Teachers Spend Professional Learning Time, and Does It Connect to Classroom Practice? Findings from the 2022 American Instructional Resources Survey*, RAND Corporation, RR-A134-18, 2023. As of July 18, 2025:  
[https://www.rand.org/pubs/research\\_reports/RRA134-18.html](https://www.rand.org/pubs/research_reports/RRA134-18.html)