

Virginia Mathematics Textbook and Instructional Materials Implementation Tool



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Introduction

What are high-quality textbooks and instructional materials?

Textbooks and other high-quality instructional materials (HQIM) are systematic print or digital curricula that serve as the primary curriculum basis for a grade-level subject or course. HQIM provides:

- adequate content and materials for student mastery of corresponding *Standards of Learning*;
- instructional practices that are aligned with general and discipline-specific research evidence;
- assessments to monitor student mastery of curriculum content;
- guidance for meeting student needs including enrichment opportunities and intensification for students who are at-risk of not mastering curriculum content, including English language learners and students with disabilities; and
- resources for teachers that develop content knowledge, support implementation of instructional practices that are based on reliable, trustworthy, and valid evidence and have a demonstrated record of success, and build understanding of the rationale for curricula components.

Rationale for the use of high-quality textbooks and instructional materials

Research indicates that access to high-quality textbooks and instructional materials (HQIM) is the first step in positively impacting student outcomes. HQIM are designed to allow teachers to spend less time building lessons from scratch and searching the internet for materials/activities and spend more time and energy on high-leverage activities that lead to student success, such as internalizing content, analyzing, and acting on student progress data.

Evidence-based arguments include:

- Quality curriculum has a larger impact on student achievement than many common school improvement interventions and costs less.
- Whole-class exposure to rigorous, content-rich curriculum increases both quality and equity.
- High-quality curriculum supports teachers' practice and helps them to develop subject expertise.
- Externally developed curriculum materials free teachers up to focus on effective pedagogy—how to teach—instead of spending time developing materials from scratch.

(Magee and Jenson, 2018)

The five steps of implementation

Successful implementation of HQIM goes beyond the adoption of materials. In order to impact student outcomes, shifts in how materials are used within the classroom must be supported by all levels of educators in a division. The implementation process includes steps that are non-linear at times but do include predictable stages.

Figure 1: Phases of HQIM Implementation



Exploration: Divisions use their approved adoption process to review and select HQIM aligned to the 2023 Mathematics *Standards of Learning* and reflect the teacher needs and student population of their division.

Implementation Launch: Teachers have access to HQIM and participate in professional development on the use of the materials; leaders establish or review systems and structures for support.

Initial Implementation: Leaders set and monitor expectations for implementation; teachers engage in collaborative planning and use materials as intended.

Consistent implementation: Leaders integrate HQIM into regular practices, policies, and procedures, including an emphasis on ongoing professional development.

Sustainability: Leaders and mathematics coaches facilitate and support teachers in making adaptations of materials so that all students can access grade-appropriate content based on their needs and performance.

How to use this tool

The Virginia Mathematics Textbooks and Instructional Materials Implementation Tool is intended to support division leaders with the selection and implementation of HQIM.

Within each phase of the implementation process, essential questions are provided to allow division leaders to frame the work and determine steps needed to proceed within the respective phase. Key actions are provided to support division leaders, school leaders, and teachers within each phase of implementation.

Phases at a Glance

Exploration

- Division Leaders
 - Establish a vision for mathematics instruction.
 - Plan the adoption process.
 - Create an adoption team made up of key stakeholders including leaders, teachers, parents and students.
 - Provide professional learning opportunities that support the vision for mathematics and shifts towards HQIM implementation.
- Adoption Team
 - Develops the selection rubric and prepares for reviews.
 - Reviews, pilots, and selects the HQIM to purchase.

Implementation Launch

- Division Leaders
 - Adopt, purchase, and distribute HQIM.
 - Define and communicate expectations for HQIM implementation.
 - Create conditions to support school leaders with implementation.
 - Provide professional learning opportunities that support implementation of adopted HQIM.
- School Leaders and Mathematics Coaches
 - Communicate the vision for mathematics instruction to teachers and stakeholders.
 - Notify students and families of relevant material changes.
 - Define and communicate expectations for HQIM implementation that are aligned with division expectations.
 - Create conditions to support teachers with HQIM implementation.
- Teachers
 - Open and organize materials.
 - Participate in training to learn how to use the HQIM as intended.
 - Engage in professional learning aligned to the division's vision for mathematics instruction.
 - Prepare for shifts in instruction to support lesson plan implementation and assessment requirements of the new materials.

Initial Implementation

- Division Leaders
 - Ensure implementation expectations are aligned with HQIM and the vision for mathematics instruction.
 - Establish routines and procedures for monitoring implementation.
- School Leaders and Mathematics Coaches
 - Reinforce division expectations for HQIM implementation and the vision for mathematics instruction.
 - Establish school routines and procedures for monitoring implementation and use resulting data to provide support. Use the VDOE Mathematics Walkthrough Tool to collect data on teacher implementation.
- Teachers
 - Use HQIM as intended.
 - Focus on lesson implementation and preparation prior to each class.
 - Implement feedback and support from leaders to improve the implementation of HQIM.

Consistent Implementation

- Division Leaders
 - Establish a culture of continuous improvement.
 - Reinforce mathematics vision for instruction in division support structures.
 - Shift oversight of the HQIM implementation to school leaders.
- School Leaders and Mathematics Coaches
 - Reinforce expectations for implementation through mathematics learning communities.
 - Take ownership of the HQIM implementation process.
 - Continue to use school routines and the VDOE Mathematics Walkthrough Tool to monitor implementation and provide data to provide teacher feedback needed to improve implementation.
 - Equip teachers to support implementation.
- Teachers
 - Use the HQIM and follow publisher recommended pacing.
 - Consistently leverage scaffolds in the HQIM to support all students to meet grade level expectations.
 - Take ownership of collaborative planning and feedback cycles to drive improvement and support grade level instruction of all students.

Sustainability

- Division Leaders
 - Maintain a culture of continuous improvement.
 - Maintain a vision for mathematics instruction and HQIM implementation.
- School Leaders and Mathematics Coaches
 - Shift mathematics learning community ownership to teachers.

- Use the VDOE Mathematics Walkthrough Tool and other division tools to provide meaningful feedback to teachers on implementation.
- Share leadership of routines and processes with teacher leaders.
- Offer growth opportunities for teachers to develop as instructional leaders and deepen their practice in implementing HQIM.
- Teachers
 - Take ownership of collaborative planning, feedback structures, and processes to give all students access to grade-level content.
 - Engage in a culture of improvement and collaborative leadership that supports onboarding new staff.

Exploration

In this phase, division leaders lead the process to review and select HQIM with input from key stakeholders. Questions to consider when entering this phase include:

- What is the division vision for excellent mathematics instruction?
 - What instructional practices should be in place in classrooms to provide positive student outcomes?
 - What evidence of student learning should be visible in student discussion and student work?
 - What are the expectations for teacher practice?
 - How can these instructional practices inform a division vision for mathematics?
 - How will the vision be communicated to stakeholders?
 - How will progress toward the vision be tracked?
- What policies and procedures must be considered in the division adoption process?
 - How must the existing process or rubrics be revised to support the shift to a more comprehensive HQIM process?
 - How can state tools such as the [VDOE Mathematics Review Committee Correlation Reports](#) be used to support the process?

Considerations when establishing a vision for mathematics instruction:

- With participation of stakeholders, create or refine a vision for mathematics instruction.
- Communicate the vision to the local school board and school leaders, highlighting the role of HQIM in achieving the vision.

Considerations when planning the adoption process:

- Secure funding for purchasing HQIM and to provide professional learning.
- Establish a timeline with key milestones, ensuring enough time for materials selection ordering, and professional development before the school year begins.
- Solicit input from stakeholders on HQIM criteria.

- Develop a rubric to reflect HQIM criteria.
- Form an adoption team that includes teachers, instructional leaders, mathematics coaches, and other stakeholders, and appoint a team leader.
- Review [VDOE Mathematics Review Committee Correlation Reports](#) to determine HQIM to consider for the division review process.
- Develop a communications plan for staff and the community on the adoption process and the intention to shift to HQIM.
- Engage external professional development providers as needed.
- Oversee the implementation of the adoption team and facilitate the consensus process in determining HQIM for the division.
- Allow adoption team to pilot materials.
- Finalize HQIM selection using feedback from the rubrics and input from the pilot process.
- Determine any gaps in alignment between the adopted HQIM and the expectations of the 2023 Mathematics *Standards of Learning* and determine lessons and resources that can be used to address these gaps.

Implementation Launch

In this phase, division leaders adopt, purchase, and distribute materials as school leaders communicate the vision of mathematics and the implementation process for HQIM.

Questions to consider when entering this phase include:

- How will division and school leaders facilitate teacher and stakeholder internalization of the division’s vision for mathematics instruction?
 - How can the [Mathematics Instructional Guides](#) and the Mathematics Walkthrough Tool be used to support the division vision for mathematics?
 - How can teacher leaders be used to embody the vision and move the talking points forward within the school?
- How will division and school leaders get buy-in for HQIM in schools?
 - How will mathematics coaches and teacher leaders be used to generate buy-in with HQIM?
 - What are challenges that staff will encounter around the shift that occurs when implementing HQIM?
 - How will instructional leaders and principals be trained to support the mindset shift that occurs with HQIM implementation?

Considerations during program installation include:

- Purchase all required materials and professional learning to support HQIM implementation.
- Integrate identified lessons and resources developed to address gaps in HQIM into a cohesive HQIM-based curriculum.

- ❑ Define and communicate expectations for HQIM implementation with all stakeholders.
- ❑ Define the roles, expectations, and support for the implementation of HQIM at each system level (division leaders, school leaders, mathematics coaches, teachers) to support implementation.
- ❑ Align division policies and procedures, such as professional learning time, grading, lesson implementation, and resource allocation, to the HQIM.
- ❑ Partner with a professional learning provider to create a cohesive, division-wide professional learning plan for implementing HQIM.
- ❑ Participate in professional learning or training to deepen leader and teacher understanding of the approach, design principles, content, instructional strategies, and resources required to implement HQIM successfully.
- ❑ Schedule regular implementation meetings at the division and school levels to review feedback and data.
- ❑ Engage school and division leaders in professional learning on using the VDOE Mathematics Walkthrough Tool to reinforce the division’s vision for mathematics instruction, collect HQIM implementation data, and provide teacher feedback.
- ❑ Set expectations that:
 - implementation of HQIM is a priority.
 - HQIM should be used as designed.
 - unit and lesson implementation planning and student work analysis occur both within collaborative planning time/PLC and independently.
 - data from embedded formative and summative assessments is regularly used to assess students’ gaps and strengths.

Initial Implementation

In this phase, leaders refine systems and structures to support the initial implementation of HQIM. Questions to consider when entering this phase include:

- What does lesson and unit preparation look like at the school level?
- How can existing routines and procedures be revised to align with the division’s vision for mathematics instruction and the expectation of HQIM implementation?
- How will mathematics coaches and teacher leaders be used to support lesson and unit preparation?
- How will feedback from the VDOE Mathematics Walkthrough Tool help teachers with HQIM implementation?

Considerations during initial implementation include:

- ❑ Ensure school leaders and teachers have ongoing, job-embedded professional learning focused on understanding the use of HQIM materials with instruction and to deepen understanding of the HQIM approach, content, and strategies.

- ❑ Reinforce protocols and expectations for unit and lesson preparation and professional learning (e.g., professional learning communities, coaching, professional learning days).
- ❑ Use teacher feedback and student performance data to inform the development or selection of resources needed to address gaps in content and expectations between the adopted HQIM and the 2023 Mathematics *Standards of Learning*.
- ❑ Utilize the VDOE Mathematics Walkthrough Tool for data collection and share this data with division and school implementation teams.
- ❑ Provide routine feedback to teachers on their use of HQIM with instruction, highlighting opportunities for educators to hold higher academic standards in providing instruction and assessment aligned to the 2023 Mathematics *Standards of Learning*.
- ❑ Reinforce the expectations for using HQIM by addressing challenges and concerns.
- ❑ Highlight instances of effective implementation, share success stories, and facilitate observation opportunities for other educators.

Consistent Implementation

In this phase, HQIM is fully integrated into teachers’ regular practice and leaders continue to reinforce the division and school vision for mathematics instruction. Questions to consider when entering this phase include:

- What professional development is needed to support experienced teachers in the use of HQIM?
- What professional development is needed to support new teachers in the use of HQIM?
- As teachers face challenges during the implementation process, how will the “why” and key messages be communicated to teachers?
- How will data be used to inform revisions to current policies and procedures needed to further support HQIM implementation and increase student outcomes in mathematics?
- How will teacher feedback be used to support a focus on the instructional practices within HQIM?

Considerations during consistent implementation include:

- ❑ Create and execute a cohesive, division-wide instructional learning plan aligned to the HQIM and differentiated for experienced and new teachers and leaders.
- ❑ Continue elevating success stories demonstrating how the HQIM improves teaching and learning.
- ❑ Continue communicating the division’s vision for mathematics instruction and reinforcing it through the continual alignment of policies, procedures, new initiatives, and professional development to the vision and HQIM.
- ❑ Collect, organize, and use data from the embedded assessments and state assessments to drive the division-wide assessment strategy and implementation improvements.

- Use funding to provide professional learning and replenish HQIM, such as teacher guides, student consumables, and manipulatives.
- Shift oversight of HQIM to school leaders and provide school leaders opportunities to collaborate, and to share and learn from each other and division leadership.
- Begin transitioning the facilitation and ownership of unit and lesson preparation, learning, and collaborative structures to teacher leaders within the schools.
- Support teachers as they purposefully plan scaffolds and support to ensure students receive consistent access to grade level instruction.
- Continue support to school leaders and instructional coaches on the use of the VDOE Mathematics Walkthrough Tool to include a focus on using data to inform teacher feedback and provide additional support for HQIM implementation.

Sustainability

In this phase, leaders maintain a culture of high mathematics expectations, reinforce an evolving vision of mathematics excellence, and promote continuous improvement.

Questions to consider when entering this phase include:

- How will a vision of mathematics instruction and a culture of continuous improvement within the division be maintained as other initiatives are implemented?
- What is the ongoing professional development plan for new leaders (division and school) and teachers in terms of preparation for implementation and support for HQIM?
- How is student performance used to inform the progress towards grade level mastery and to adjust academic and professional learning plans?

Considerations during sustainability include:

- Communicate the continued importance of HQIM as a central component of core instruction.
- Provide division-wide onboarding on the division mathematics vision and the use of HQIM.
- Prioritize time for teacher collaboration and planning using HQIM in school schedules.
- Spotlight success stories, especially those tied to student academic achievement and gains.
- Utilize the VDOE Mathematics Walkthrough Tool and division evaluation protocols to provide teacher feedback.
- Use funding to provide professional learning and replenish HQIM, such as teacher guides, student consumables, and manipulatives.
- Offer growth opportunities for teachers to develop as instructional leaders and deepen their practice in implementing their instructional materials and the use of scaffolds to address the learning needs of all students.

References

Jacqueline Magee and Ben Jensen (2018), *Overcoming Challenges Facing Contemporary Curriculum*. Melbourne, Australia: Learning First, November 2018.

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