BACK-TO-SCHOOL

BLUEPRINT

PLANNING FOR A BRIGHTER FUTURE AFTER COVID-19

ACCESSING GRADE-LEVEL CONTENT

RennieCenter
EDUCATION RESEARCH & POLICY

ACCESSING GRADE-LEVEL CONTENT

COVID-19 has resulted in an unprecedented loss of instructional time in Massachusetts schools. When students return to school, either in-person or virtually, researchers are predicting significant learning loss (NWEA, 2020). All student groups are likely to have missed some critical content, but students of color and low-income students will be disproportionately affected.

Many marginalized students lack access to technology necessary for at-home learning. Even when technology is available, students may not have an appropriate study space or the support they need from adults to access assignments. For example, families facing language barriers have been thrust into the role of students' primary educators. Many have struggled, receiving school letters and assignments primarily written in English. Other children live in households affected by rising unemployment and food scarcity, urgent needs that make it difficult to focus on learning. In these and other situations, opportunities to engage in deep learning and experience high-quality instruction are likely to be limited.

Access to grade-appropriate instruction is critical to educational equity. Research shows that when students are caught in cycles of widespread reteaching and remediation, they lack the opportunity to catch up (TNTP, 2018). The following action guide highlights the importance of grade-appropriate instruction. It provides strategies to diagnose unfinished learning, assess the strength of instructional materials, provide "just-in-time" scaffolds, and deliver effective professional learning that helps educators navigate a new set of instructional needs.

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# INTRODUCTION

WHAT IS THE COVID SLIDE?

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Each year, many students lose a portion of their learning over summer vacation. Without high-quality summer experiences that provide the opportunity to use their academic skills, students experience declines in cognitive development and academic achievement. This is referred to as the "summer slide." Looking to other examples of widespread learning loss, educators have begun to refer to COVID-related learning loss as the "COVID slide." The magnitude of the COVID slide will not be known for some time, but researchers have begun to predict its impact.

Impact on Mathematics.

Experts predict that the most dramatic learning loss will be in mathematics. According to **NWEA**, "students are likely to show much smaller learning gains [in mathematics], returning with less than 50% of the learning gains and in some grades, nearly a full year behind what we would observe in normal conditions" (**NWEA, 2020**). The graph below forecasts learning loss in mathematics as a result of the pandemic.

Figure 1. Mathematics forecast
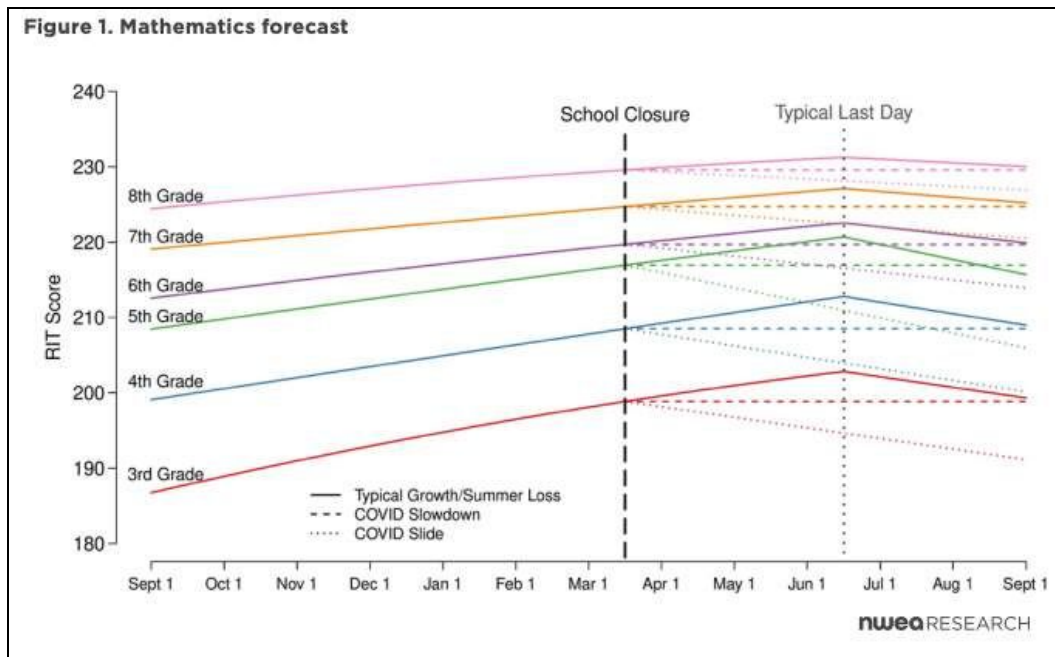
Impact on Reading.
Slightly better than the predictions for math, "preliminary COVID slide estimates suggest students will return in fall 2020 with roughly 70% of the learning gains in reading relative to a typical school year." (**NWEA, 2020**)

Figure 2. Reading forecast
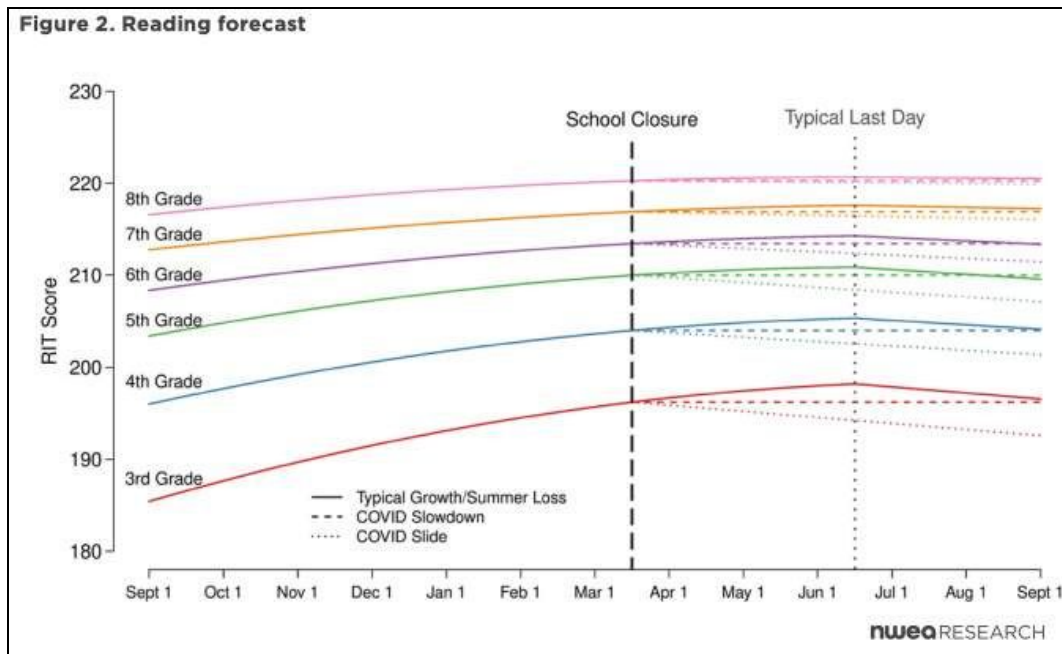
Impact on Low-Income Students.
Low-income families have been disproportionately impacted by COVID-19 and have faced barriers in accessing online learning. Many students do not have the technology necessary for online learning. Even when technology is available, a large number of economically disadvantaged students have caretakers who are working outside the home during school closures. As described by former Secretary of Education John King, "'The risk is that in some schools next year, you are going to have a kid with parents who were able to provide high quality supplemental instruction at home, sitting next to a kid who hasn't received meaningful instruction since February'" (**Washington Post**, 2020).

WHAT CAN WE LEARN FROM THE SUMMER SLIDE?
Although learning loss from COVID-19 will be greater than the typical summer slide, research on the summer slide provides valuable insight into areas where students' learning will be most deeply affected.

- "While there is some controversy about the magnitude of summer learning loss, three trends are consistent across seasonal learning research findings: achievement typically slows or declines over the summer months, declines tend to be steeper for math than for reading, and the extent (proportionally) of loss increases in the upper grades" (NWEA, 2020)

- "…two-thirds of the 9th grade reading achievement gap [of Baltimore students] can be explained by unequal access to summer learning opportunities during elementary school. This achievement level is a huge determinant of whether students stay in school or follow a college-preparatory track" (Karl Alexander, Doris Entwisle, and Linda Olson, 2007)

- "Elementary students' performance falls by about a month during the summer, but the decline is far worse for lower-income students. Most disturbing, it appears that summer learning loss is cumulative and that, over time, these periods of differential learning rates between low-income and higher-income students contribute substantially to the achievement gap" (McCombs, et al, 2011, cited in Smith, 2011).

WHAT HAVE OTHER TIMES OF LOST LEARNING TAUGHT US?

Though COVID-19 represents the first modern example of extended school closures in Massachusetts, educators can learn from national and international crises that led to learning loss. It is important to note that each extended school closure is different. Teacher pedagogy has evolved significantly since teacher strikes in Argentina in the 1980s and 1990s and Hurricane Katrina in 2005.

- **Teacher Strikes —** Two researchers studying teacher strikes in Argentina in the 1980's and 1990's discovered that the combined time outside of school for students (for some it was up to 90 days) lowered their chances of earning a high school diploma or a college degree compared to peers in other parts of the country. (**Jaume and Willen**, 2019)

- **Hurricane Katrina —** The Center on Reinventing Public Education, after interviewing school heads and academic leaders who received students back to New Orleans post-Katrina, noted the effects of learning loss following the disaster. On average, students returned "more than two years below grade level, some much more. Losses were most dramatic in mathematics."

THE IMPORTANCE OF GRADE-LEVEL CONTENT

WHAT IS GRADE-APPROPRIATE INSTRUCTION?

Throughout this action guide, we use the term "grade-appropriate instruction" to encapsulate all forms of learning that equip students to master rigorous, grade-level standards. This refers to far more than explicit teaching. Examples of grade-appropriate instruction are:

- **Real-World Application —** Students at the Donald McKay School in East Boston apply an understanding of ratios to analyze suspension data at various Greater Boston elementary schools.

- **Rigorous, Text-Based Discussion —** First graders read *Alma and How She Got Her Name* by Juana Martinez-Neal. They follow the text with a discussion of how names connect people to their identity and culture.

- **Civic Engagement —** Students in Generation Citizen, an action civics program, build civic efficacy by tackling a real issue in their local community. For example, students in Lowell noticed that vaping companies were targeting youth. They "[filed] a bill limiting the sale of flavored vaping products statewide to adult-only stores" (Generation Citizen, 2019).

WHY GRADE-APPROPRIATE INSTRUCTION MATTERS

In the context of dramatic learning loss, it may seem counterintuitive for educators to move forward with grade-level content. However, research shows that when students receive below-level instruction, many never catch up. As described in a 2020 TNTP report, "We know that typical remediation—assigning work better suited for earlier grades—won't come close to catching students up and will likely compound the problem." Inequitable access to grade-appropriate instruction widens opportunity gaps for the Commonwealth's most marginalized students. These facts from **The Opportunity Myth** explain several reasons why:

- **An Opportunity to Advance —** Research shows that when students who start the year behind receive grade-appropriate assignments, opportunity and achievement gaps shrink.

- **Who Has Access? —** Student of color and those from low-income communities spend significantly less time on grade-appropriate learning than their peers from higher-income and predominantly white communities.

- **Who Succeeds? —** When given the opportunity, students of color succeed in grade-appropriate work at similar rates to white students.

- **The Power of Expectations — Implicit bias**, which refers to unconscious attitudes and stereotypes that impact actions, shows up in classrooms every day. It is a primary reason why students of color have far less access to rigorous instruction than their white peers, even though they succeed on rigorous assignments at similar rates. Acknowledging and addressing personal bias is a powerful step towards providing grade-appropriate instruction to every child. Further detail is provided in the *Grade-Appropriate Supports* section.

EXPANDING ACCESS TO RIGOR

All educators and school leaders have a role in expanding access to grade-level content for Massachusetts students. The Rennie Center consulted research literature and conducted interviews with subject-matter experts to determine what educators will need to facilitate grade-appropriate learning during the 2020-2021 school year. We identified the following priority areas, described in detail in this action guide:

- **High Quality Instructional Materials**
- **Effective Professional Learning**
- **Actionable Data**
- **Grade-Appropriate Supports**

BEGINNING WITH RELATIONSHIPS

Confronted with graphs predicting widespread learning loss, many educators will look for opportunities to accelerate instruction. In doing so, educators must remember that social and emotional wellbeing is critical to learning. The need for academic acceleration should not compete with schools' plans to address trauma and foster a sense of community among students, families, and educators.

"The neuroscience is clear on the connection between emotions, trust, and learning. Stress hormones from mistrust block cognition. Students respond to a teacher's focus on care by giving her permission to be tough and push them toward higher achievement."
— Zaretta Hammond

As school leaders and educators plan to reopen schools, it is important to acknowledge the trauma of the pandemic and reposition schools as welcoming spaces for students and families. Educators must be particularly attentive to the needs of students of color and low-income students, whose communities have disproportionately experienced the toll of the pandemic. These students and their families have experienced a collective trauma that is far greater than

that of their white, middle-class peers. Without a trusting and culturally responsive environment, students will not be able to access the content that this guide describes. Strategies to build trusting, authentic relationships with students and families are included in the Rennie Center's **Rebuilding Community action guide**.

As part of the **Back to School Blueprint**, the Rennie Center has released two previous guides that discuss critical social-emotional supports. Though action guides may be read independently, we recommend that educators review those guides first. You can find them **here** and **here**.

ACCESSING GRADE-LEVEL CONTENT

HIGH-QUALITY INSTRUCTIONAL MATERIALS

"Switching to higher-quality, more standards-aligned curricular materials can boost student achievement more than an extra half-year of learning time."
— Massachusetts Department of Elementary and Secondary Education, 2019

CURRICULUM MATTERS

Research shows that the materials put in front of students matter. An effective, rigorous curriculum is a powerful lever for equity, helping shrink the gap between economically disadvantaged students and their wealthier peers (Berner, 2020). After a year of interrupted learning, the need for high-quality, standards-aligned materials has never been greater, especially for the Commonwealth's most marginalized students. When school begins in the fall, educators can help all students catch up by ensuring access to well-designed, grade-appropriate instructional materials. The list below outlines the key benefits of high-quality materials (DESE, 2018).

1. **They improve student outcomes.** When skilled educators use standards-aligned materials, students learn more. Strong materials help teachers provide rigorous, coherent instruction across grade levels. Quality materials help to "overcome the very high

correlation between family wealth and students' academic achievement" (Steiner et. al., 2019).

2. **They make teaching and learning easier.** When educators have access to high-quality materials, they have time to focus on meeting all students' needs rather than creating or supplementing materials on their own.

3. **They offer a cost-neutral lever for school improvement.** Higher-quality materials are not necessarily more expensive than lower-quality products.

ASSESSING, SELECTING, AND ADOPTING MATERIALS

Students who start the year off behind, as many will in Fall 2020, benefit the most from grade-appropriate rigor. School leaders can support students (and educators) by providing access to high-quality, engaging, standards-aligned materials. Educators and administrators can use the following strategies to assess the strength of their current materials and, if necessary, select new materials.

Assess Materials

Educators should begin by looking for a review of their current curriculum on **Curriculum Ratings by Teachers (CURATE)** and **EdReports**. These rigorous reviews provide information about various programs' alignment to standards, accessibility for students with diverse needs, and usability for educators. If the curriculum you use has not been reviewed by either organization, educators can use the **CURATE rubrics** to conduct an independent assessment.

Adapt Materials

Both CURATE and EdReports offer valuable information on ways to improve curriculum. Review full reports to identify areas where materials need to be strengthened. For example, if a math curriculum includes problems that are disconnected from students' lives, teachers can strengthen the materials by incorporating real-world problems that are relevant to student experiences.

If you find that your current curriculum is not of high quality, these resources will help you understand where the program falls short. If you are unable to rapidly replace an existing lower-quality curriculum, this knowledge will empower your team to adapt materials as necessary until you are able to switch to a higher-quality product.

Select Materials

If your team is ready to adopt a new curriculum, refer to this **Selecting High-Quality Curriculum and Intervention Materials link** on the MA Tools for Schools website. This guide provides a description of an effective curriculum evaluation and selection process. It is important to refer to rigorous reviews such as **EdReports** and **CURATE** to identify

high-quality products. Once you have narrowed your list to a few potential choices, engage a team of stakeholders to review each product. This team should include educators, students, and families. Administrators can use the **CURATE rubrics** to facilitate the review process. These rubrics are aligned to Massachusetts standards and priorities in each subject area.

Supplemental Materials

Many educators use online resources including Teachers Pay Teachers and ReadWriteThink to supplement core materials. If educators choose to access these materials, they must be conscious of resource quality given that they are not vetted. **Research by The Fordham Institute** revealed that "many resources fail to align to the academic standards to which they claim alignment" (Polikoff, 2019). In other instances, the materials provide students with background knowledge that they are not supposed to have before reading a text. This can inadvertently lower the cognitive demand of a lesson.

INVESTIGATE CULTURAL RESPONSIVENESS

When selecting a curriculum, educators must assess the extent to which materials value diverse cultures and perspectives. In addition to improving student engagement, grades, and graduation rates, culturally responsive materials "have significant influence on racial attitudes and biases, and provide the cognitive tools needed to critique institutional racism" (J. Bryan-Gooden, M. Hester, & L. Q. Peoples, 2019).

The CURATE reports include indicators related to diverse representation. Schools can use the NYU Metro Center's **Culturally Responsive Curriculum Scorecard** to conduct a comprehensive review. In addition to helping educators select materials, this scorecard provides valuable insight on areas where schools may need to adapt materials in order to serve students. After scoring curriculum, educators can look to the **Culturally Responsive Curriculum Scorecard Toolkit** and the **#DisruptTexts** movement for action steps.

IMPLEMENTATION CONSIDERATIONS

The curriculum selection process requires a significant time investment. The selection team must review a range of options to select the materials that best meet the needs of the school community. Instruction Partners offers **valuable resources** that walk teams through each step of the curriculum adoption process. In addition, the Massachusetts Department of Elementary and Secondary Education (DESE) offers support for districts looking to make the shift to a high-quality curriculum. This includes an Evaluation and Selection Network which supports schools as they review and select materials. More information is available on the **DESE website**.

EFFECTIVE PROFESSIONAL LEARNING

Professional learning is essential to maximizing the benefits of high-quality instructional materials. This section offers strategies and considerations for educators.

PROFESSIONAL LEARNING MATTERS

Each year, districts across the nation make enormous investments of both time and money in teacher development efforts (TNTP, 2015). Too often, these investments focus on "sit and get" professional learning that does not lead to meaningful changes in teacher practice. Active and empowering professional learning is critical to maximizing the benefits of high-quality instructional materials. This section explores several key features of effective professional learning, drawn primarily from a research synthesis produced by the **Learning Policy Institute** in 2017. Educators and administrators can use this guidance to strengthen the use of current materials and support implementation of new materials.

1. PROVIDE CONTENT-FOCUSED PROFESSIONAL LEARNING

Research shows that students benefit when their teachers receive professional learning that is centered on the materials they use with students every day (DESE, 2019). When teachers try out materials in partnership with colleagues, they see the misconceptions that may result in learning difficulty for students (Hill, 2020). At the same time, they learn strategies to address potential barriers. After a session, teachers can immediately apply this learning in the classroom. Despite evidence of its effectiveness, long-term professional learning centered on instructional materials is uncommon in U.S. schools (Hill, 2020). Additional evidence in support of curriculum-focused professional learning is included in this **EdWeek article**.

2. FOSTER TEACHER COLLABORATION

Effective professional development provides opportunities for teachers to collaborate and share strategies with their colleagues. This may include forming a **professional learning community**, hosting curriculum-focused grade-level team meetings, or offering teachers opportunities to facilitate lessons for their colleagues. This **set of collaborative planning protocols**, compiled by Instruction Partners, provides a range of options for educators getting started with collaborative professional learning.

3. EMPOWER EDUCATORS

It is important to note that even the highest-quality instructional materials are not perfect. Every educator will need to adapt materials in some way to meet the needs of their students. For example, students in Massachusetts classrooms represent a range of cultures and family backgrounds. Though published curricula are increasingly culturally responsive, many have a long way to go.

Even the most culturally responsive curriculum will not meet the needs of all learners. For example, many Massachusetts schools have a large population of Latinx students. Within this population, students may have ethnic and cultural origins from South America, Central America, and the Caribbean. Students from the Dominican Republic, El Salvador, and Ecuador each have unique cultural identities, traditions, and histories. Educators should strive to ensure that every child has an opportunity to see themselves in their learning, in addition to gaining understanding of other cultures, traditions, and experiences.

"Books are sometimes windows, offering views of worlds that may be real or imagined, familiar or strange. These windows are also sliding glass doors, and readers have only to walk through in imagination to become part of whatever world has been created and recreated by the author. When lighting conditions are just right, however, a window can also be a mirror. Literature transforms human experience and reflects it back to us, and in that reflection we can see our own lives and experiences as part of the larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books."
— Rudine Sims Bishop

Curriculum adaptation requires a significant time investment, and a single teacher cannot and should not reasonably undertake this effort alone. This process involves far more than swapping out one text for another that better reflects students' backgrounds. As educators replace texts, tasks, and assessments, they must ensure that adaptations are grade-appropriate and aligned with rigorous standards. When done well, the work of curriculum adaptation is a rich professional learning experience. During this process, educators should consult the standards to ensure that all lessons are rigorous and relevant.

This **NAESP Guide** provides resources for school administrators seeking to utilize students' cultural assets to strengthen teaching and learning. Educators can also reference the work of **P.S. 63 Star Academy** in New York City. The following resource shares how educators at the school adapted a unit to make it more culturally responsive. This school's story is included in the **NYU Metro Center's Culturally Responsive Curriculum Toolkit**.

4. PROMOTE ACTIVE LEARNING

Rather than lecture-based professional development, teachers need opportunities to try out new strategies. Learning Policy Institute research found that "Opportunities for 'sense-making' activities are important. Such activities often involve modeling the sought-after practices and constructing opportunities for teachers to analyze, try out, and reflect on the new strategies." Active professional learning empowers educators by providing opportunities to co-construct knowledge, rather than viewing teachers as passive recipients of information (NCTE, 2020).

5. PROVIDE MODELS OF EFFECTIVE PRACTICE

Teacher leaders and instructional coaches are an important resource to help educators visualize effective instruction. Consider preparing a coach to visit teachers' classrooms to facilitate and model particular lessons. Identify educators within the building who can serve as models of effective instruction. Schedule times for educators to visit their colleagues' classrooms to see what it looks like when the curriculum is implemented well. Models can also include videos or written case studies that describe effective practice. **This resource from Instruction Partners** provides guidance for coaches on effective methods to support teachers.

6. ENCOURAGE REFLECTION

Educators need time and space to **step back and reflect** on how curriculum implementation is going. What is working well? What challenges remain? What support is needed to address these challenges? Devote time during coaching sessions, professional learning, and team meetings for educators to reflect individually, one-on-one, and as a group. This should include opportunities for educators to give and receive feedback from administrators, coaches, and colleagues. In addition to recommending areas for improvement, coaches and administrators should make it an explicit priority to offer positive feedback during these meetings.

7. INCORPORATE INSTRUCTIONAL IMPROVEMENT CYCLES

Instructional improvement cycles promote educator reflection and improve teacher practice. During an improvement cycle, educators select an instructional strategy, implement the strategy, collect data to monitor its success, and use this data to reflect on results (Cherasaro et. al., 2015). This scientific approach benefits teacher development and student learning. Educators can use **this toolkit** from the Regional Educational Laboratory Central to get started with instructional improvement cycles.

The image below describes key steps in an instructional improvement cycle, also referred to as a Plan-Do-Study-Act cycle.

- **Plan:** Based on the needs of the school and its students, educators identify an instructional change that they believe will lead to improvement. They select a quick, easy-to-collect source of data to monitor progress. This can include exit tickets or a student observation rubric.
- **Do:** Educators receive necessary training and then implement the strategy in their classrooms. They collect student data so that they will be able to tell if the instructional change is an improvement.
- **Study:** Educators meet to review the data that they collected. They compare what actually happened to their predictions at the beginning of the process.
- **Act:** Educators refine the instructional strategy based on what they learned. If it's not working, they may abandon it. If it's working but requires tweaks, they will adjust it. If it's working very well, they can adopt and scale the strategy school-wide.
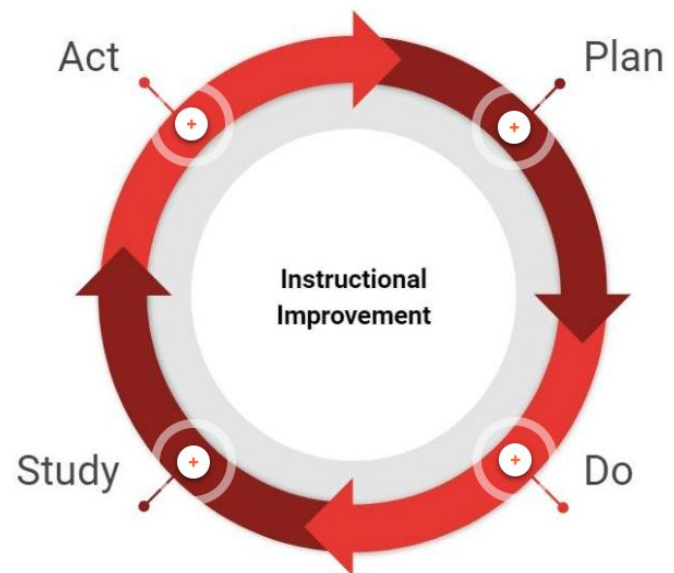
8. INCORPORATE INSTRUCTIONAL IMPROVEMENT CYCLES

In order to use new materials skillfully, educators need more than a one-day introduction. The strategies listed above should be ongoing, and not offered solely when the curriculum is new. This **Instruction Partners resource** offers strategies for explicit educator training, collaborative planning, and ongoing coaching.

ACTIONABLE DATA

This section describes strategies to assess unfinished learning with a focus on actionable data for educators.

WHAT IS UNFINISHED LEARNING?

Unfinished learning "refers to any prerequisite knowledge or skills that students need for future work that they don't have yet" (Allison, 2017). This learning is often referred to as a knowledge gap or area of weakness. Instead of focusing on a child's deficits, educators use the term "unfinished learning" to inspire action and reinforce a belief in each child's ability to succeed. The use of the term is not meant to imply that a person's learning can ever be finished.

WHY ASSESS UNFINISHED LEARNING?

As noted by the Achievement Network, "not all unfinished learning has the same effect on students' ability to access grade-level content." In many instances, educators can still provide access to grade-level instruction if the appropriate scaffolds are in place.

Assessments help educators understand any widespread gaps in prerequisite knowledge that may be addressed in whole-group instruction. As described in **this Achieve the Core article**, this

approach is only necessary in "situations that require prerequisite knowledge for entry into a lesson or task" (for example, when students need a baseline understanding of exponents before they work on solving quadratic equations). In most cases, diagnostic assessment data should inform small-group differentiated instruction. When teachers are aware of the nature and magnitude of unfinished learning, they can identify appropriate scaffolds.

THE NEED FOR CULTURALLY RESPONSIVE ASSESSMENT

As discussed in the upcoming *Grade-Appropriate Supports* section, instruction and assessment practices in U.S. schools tend to reflect white-dominant cultural norms in their content and their form. Assessments often incorporate references that are disconnected from the lives of students of color, while reinforcing expectations of language use and communication style grounded in the norms of white-dominant culture. Such assessments provide an inaccurate picture of what students of color know and can do.

The goal of diagnostic assessments is to gain an accurate understanding of students' knowledge and skills. There is significant flexibility in how educators can gather this information. It may include providing students with a menu of options for how their prior learning will be assessed, including in writing, digitally, or orally. If possible, educators can ask children to work through a math problem or discuss a science phenomenon in their native language. Several culturally responsive assessment strategies are discussed in **this article from the National Council of Teachers of English**.

ASSESSMENT STRATEGIES

Assessing students' current academic knowledge and unfinished learning is critical to effective teaching. However, it is also critical that educators avoid over-assessment, which takes away from valuable instructional time and may overwhelm students as they return to school after a difficult year. The strategies below focus on actionable data.

Beginning-of-year Diagnostic

Beginning-of-year assessments should prioritize content that is most critical to grade-level instruction. For example, third grade teachers need to assess students' foundational reading skills, given that most grade 2 foundational reading instruction was cut short this spring. Fourth grade teachers need to assess students' understanding of fractions, which represents grade 3 material, given that their students will build upon this knowledge in units focused on fraction equivalence, addition, and subtraction. The Massachusetts Department of Elementary and Secondary Education has identified the prerequisite standards at each grade level, available **here**.

Assessment Options

If your school already uses high-quality curriculum materials, use diagnostic assessments provided by the publisher to assess unfinished learning (TNTP, 2020). In most cases, high-quality curriculum provides specific teacher guidance based on the results of

diagnostic assessments. This includes particular strategies that educators can use to accelerate student learning in areas where students have not mastered grade-level content.

For schools that have not adopted high-quality instructional materials, there are several curriculum-agnostic resources that teachers can use. Educators can use DIBELS to assess students' foundational reading skills. There are a number of education technology products that provide diagnostic assessments coupled with instructional suggestions or e-learning units to address students' areas of need. Tools used by Massachusetts districts include, but are not limited to, Curriculum Associates' i-Ready, NWEA's MAP, and Renaissance Learning's STAR. (It is important to note that each of these products has a cost associated.)

Additional information about diagnostic assessments is included in the **TNTP Learning Acceleration Guide**.

Ongoing Diagnostic Assessments

In order to provide "just-in-time" supports, it is important to take a unit-by-unit approach to assessment. As noted in the TNTP Learning Acceleration Guide, "many diagnostics do not provide particularly granular information about [students'] learning gaps." In order to scaffold content, teachers do not need to know every element of last year's instruction that students missed. Instead, they must be aware of the prerequisite skills that will prevent students from accessing the content of the individual unit or lesson. Strategies for ongoing assessment include:

Mini-Assessments

Pre-assessments should be quick and targeted to the specific information that teachers need in order to plan appropriate scaffolds. **Achieve the Core** offers a range of mini-assessments in ELA and mathematics focused on major content and filterable by grade level. These resources are highlighted in the TNTP Learning Acceleration Guide.

Informal Assessments

As discussed above, teachers often do not need a formal assessment to determine students' prior knowledge. A two-question warm-up at the beginning of class or a brief conversation with students may provide educators with the information they need. Teachers can also use a task or problem from the previous year's instructional materials to identify the extent to which students have mastered prerequisite content.

Publisher-Provided Pre-Assessments

Many high-quality instructional materials include embedded assessments to diagnose unfinished learning. In most cases, the publisher identifies which prior standards are prerequisites and shares the rationale for the content of pre-assessments in the teacher's guide. These materials often inform teachers of misconceptions to watch for in student responses. Many provide recommendations for following up once unfinished learning is identified. If you're unsure whether your instructional materials provide high-quality pre-assessments, check **EdReports**. This information can be found under Indicator 3M.

GRADE-APPROPRIATE SUPPORTS

This section shares strategies to facilitate access to grade-appropriate instruction, with a focus on just-in-time scaffolds.

Students with significant unfinished learning need scaffolds and multiple entry points to access grade-appropriate instruction. These supports are critical to avoiding an approach of over-remediation, where struggling students are given work suited for earlier grades. In order to close opportunity gaps, students need a just-in-time strategy, where interventions happen right as they encounter grade-appropriate materials (Steiner & Weisberg, 2020).

It is important to note that most high-quality instructional materials offer built-in scaffolds for educators. Teachers without access to these materials, or those looking to supplement existing materials, can use the strategies below to strengthen student supports. These strategies are important at any time, but are particularly relevant as teachers seek to accelerate learning lost during the COVID-19 pandemic.

1. ENSURE SCAFFOLDS ARE CULTURALLY APPROPRIATE

Massachusetts youth are vibrant and diverse. Students in public school classrooms across the Commonwealth represent many cultural backgrounds, and they speak a wide range of home languages. Despite this diversity, the Massachusetts teaching force remains 90% white. This often creates a cultural gap between educators and students. When unaddressed, this gap perpetuates stereotypes, results in punitive discipline, and leads to teachers' difficulty in helping students make links between classroom learning and their home lives.

A longstanding and growing body of research has proven that connections between students' home culture and classroom instruction are critical to information processing and the neuroscience of learning. The groundbreaking work of Zaretta Hammond, including the book **Culturally Responsive Teaching and the Brain**, provides rich guidance for educators to deliberately connect students' cultural learning styles to classroom instruction. As Hammond notes, educators can begin a critical shift to culturally responsive teaching by building intentional relationships with students and learning the principles of collectivism.

The dominant white culture in the United States is individualistic, emphasizing self-reliance, independence, and the idea of "pulling yourself up by the bootstraps." Individualism manifests in every aspect of U.S. education including instructional pedagogy, assessment practices, and in recent years, a focus on "grit" as a means to realize student potential. This is in direct contrast to the concept of collectivism, which prioritizes the needs of the group over the individual. Many students from African, African American, Asian, and Latinx backgrounds come from communities that emphasize collectivism (Hammond, 2015).

"All instruction is culturally responsive. The question is: To which culture is it currently oriented?"
— Gloria Ladson-Billings

Educators can begin to strengthen instruction by using practices that build on the strengths of collectivism, examples of which are highlighted below. Beyond collectivism, educators should make it a goal to understand and value students' home cultures, languages, dynamics, and customs. Check out the Rennie Center's Rebuilding Community guide which includes a focus on affirming student and family identity. It is important to note that a series of instructional adaptations will not make a difference if implemented in absence of deep educator work to understand and address their own biases. For guidance on starting with the self, please refer to these **Racial Equity Tools**.

2. LET STUDENTS DO THE THINKING AND TALKING

Students are more engaged and learn better when they are talking and the teacher serves as a facilitator. Educators can shift towards this method of instruction with the following strategies.

Think Time

Teachers can encourage students to talk by incorporating more think time, rather than answering a question directly when students are unsure. This also provides opportunities for a wide range of students to participate, instead of only those who raise their hands first. Read more from Edutopia on ***Extending the Silence***.

Talk Moves

Using **Talk Moves**, educators support students to share ideas with peers and further their classmates' learning. This is an important step towards student-to-student discussion, and away from instruction that relies heavily on teacher-to-student discussion.

Cooperative Learning

Allowing students to depend on each other to further their learning creates a powerful opportunity to build a sense of community. Often this takes place in the context of student discussion and oral processing, which draws upon the strengths of students who come from oral traditions (Hammond, 2015). Read more from Edutopia on ***9 Strategies for More Students to Talk***.

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Productive Struggle

When students learn from and with peers, teachers are less likely to provide excessive scaffolding, which inhibits student growth and self-concept. At the beginning, students may want more direct assistance than the teacher is providing. Teachers can show students **this video from the YouCubed.org Week of Inspirational Math** to explain the importance of productive struggle.

3. USE EXEMPLARS TO SET HIGH EXPECTATIONS

Exemplars are a key resource for educators to advance educational equity. For students of color, English learners, and students with disabilities with unfinished learning, educators can unintentionally promote learned helplessness by holding low expectations. Research shows statistically significant differences in white teachers' expectations of Black students, when compared to their Black colleagues (Gershenson & Papageorge, 2018). Quality exemplars, when provided to both students and their educators, are one tool to promote high expectations for every student.

- **Exemplary Work —** Teachers may save exemplary work from past school years to provide a model for students as they begin an assignment. This may include a student essay, digital presentation, or audio clips and photos from class discussions that show students applying math and science skills to real-world problems.

- **Curricular Resources —** Most high-quality instructional materials include exemplars to set clear and high expectations for both students and their educators. This includes learning artifacts, such as presentations and writing samples, that students can reference before beginning an assignment. It also includes rubrics that students can use to self-assess their work.

- **Videos and Multimedia —** Teachers may provide a video to model a text-dependent or mathematical discussion. For example, the **StudySync video** provides an example of a student discussion focused on Barrio Boy by Ernesto Galarza. As modeled by the students in this video, discussions of literature provide an opportunity for oral storytelling, which serves as a powerful form of learning in many cultures. The publisher uses this video to introduce the text.

4. INCORPORATE LOW-FLOOR HIGH-CEILING TASKS

Low-floor high-ceiling tasks provide multiple entry points for students with unfinished learning. They also provide room to grow for students who are working at or above grade-level. When selecting a new curriculum or making adaptations to an existing curriculum, educators should look for tasks with multiple entry points that engage learners at all levels. The grade 5 task **linked from Illustrative Mathematics** is one example.

5. PRIORITIZE CRITICAL PREREQUISITE SKILLS

There are some areas, particularly in the elementary grades, where 2020 learning loss will be especially consequential for next year's learning progression. If students are missing the skills below, teachers may need to incorporate a couple of lessons from the previous grade. It is critical that educators do not reteach an entire unit from the previous grade as this will prevent students from focusing on grade-appropriate learning.

Mathematics
- Number Sense
- Base 10 Number System
- Fractions

English Language Arts
- Phonics
- Reading Fluency

Science
- Scientific thinking, including:
  - Asking questions, making observations, and experimentation
  - Analyzing and interpreting data
  - Explanations with evidence

6. APPLY A CROSS-DISCIPLINARY APPROACH

In Massachusetts, standardized tests do not measure science proficiency until grade 5. As a result, many schools do not offer meaningful science instruction until 5th grade. As noted by the Southern Regional Education Board, "waiting until the middle grades to give science an equal place among the academic subjects not only handicaps students' performance in reading - background knowledge is necessary for comprehension - it means they have less time to develop important thinking skills that will benefit them in all subjects" (SREB, 2020).

Fortunately, science serves as a great multidisciplinary subject — one where ELA and math can be incorporated into lessons. Infusing math, reading, and writing practices into science lessons can help students make connections across disciplines. Science instruction also helps students apply their learning to real life. In high-quality lessons, students ask questions about scientific phenomena and collect data to understand the world around them.

7. PROVIDE ACCESS TO RIGOR FOR ENGLISH LEARNERS

Educators can provide appropriate rigor for English learners by building on the many assets that students bring to the classroom. Many high-quality instructional materials offer built-in scaffolds for English learners, with suggestions for areas where educators can leverage students' home language to support instruction. This includes using cognates in students' native language to support understanding of English.

Educators should also share with students and their families that literacy skills from their home language will support their language development in English (August & Shanahan, 2006). By providing families with access to books in their native language, educators can encourage families to read to and with their children.

Across subject areas, educators should incorporate nonlinguistic representations that enable English learners to access grade-level content. As described in **this article from Cult of Pedagogy**, a nonlinguistic representation is the "expression of an idea in a way that goes beyond the use of words" (Gonzalez, 2014). Examples include movement, role-plays, pictures, and 3D models. This form of learning supports all students, including native English speakers. It is a particularly effective way to teach and assess students learning English.

8. APPLY A JUST-IN-TIME APPROACH

Rather than providing whole-group reteaching, educators should provide support to those who need it just before or at the same time as all students access a rigorous text or task. According to **EL Education**, scaffolds should be:

- Sensitive to students' strengths and challenges and respectful of all learners.
- Standards-based and in alignment with learning targets (objectives).
- Temporary and appropriate to the task.
- Used to provide a student with necessary supports to accomplish a task that is not otherwise possible.

This article from the 74 Million describes the need for just-in-time scaffolds.

What Do Just-in-Time Scaffolds Look Like?

The appropriate scaffold depends on the nature and magnitude of a student's unfinished learning. For example, a group of grade 6 students may need a range of supports to participate in a close reading exercise. Some students may need sentence frames to annotate their text as they perform a close read. Others may benefit from working with a more proficient reader to ask questions and make connections. Some students may not be able to access the text in writing alone. They may benefit from following along with an audiobook before engaging in a close read with classmates.

This applies to math as well. For example, students who missed fraction instruction in grade 3 will struggle to understand equivalent fractions in grade 4. Some students will be able to solve problems with manipulatives that they would not be able to solve without these tools. For example, visual tools will help many students understand that two 1/4 blocks are the same as one 1/2 block. The **linked video from AIR** provides an example of using manipulatives as a scaffold for fractions.

CONCLUSION

ACTION STEPS

This section includes a **list of action steps** for educators and school leaders to provide access to grade-level content.

FOR ALL EDUCATORS AND ADMINISTRATORS

❏ **Start with relationships.** Students will not be able to access rigorous content without a classroom environment where they feel safe, welcome, and known.

❏ Support your own and your team's **personal work to address bias.** In order to provide rigorous and meaningful instruction to every child, all adults must be aware of their own lens and bias. Boston's Gardner Pilot Academy provides a model for educators and school leaders looking to begin the ongoing process to de-bias. This **Teaching Tolerance article** describes how the school's leaders and educators prioritized this important work.

❏ **Assess the strength of current instructional materials** using **CURATE** and/or **EdReports**. If a review is not available for your curriculum, partner with colleagues to conduct your own review using the **CURATE rubrics**.

FOR SCHOOL LEADERS

If You Already Use High-Quality Instructional Materials

❏ Continue to follow your high-quality curriculum. Focus your efforts on supporting educators with just-in-time scaffolds. Encourage educators to avoid reteaching content from previous grades.

❏ Share data with educators on the importance of grade-appropriate instruction. Given significant learning loss, educators may be tempted to remediate more than they have in years past. Start by reading **The Opportunity Myth** as a team and discussing findings.

❏ Commit to ongoing, content-focused professional learning. Start by allocating time for educators to try out lessons with their colleagues, identify the most critical prerequisite skills, and determine just-in-time scaffolds that will help students access content.

❏ Identify areas where materials can be adapted to better meet students' needs. Even the best curriculum is not perfect. Refer to **CURATE** and **EdReports** reviews to identify areas where materials need to be strengthened. Share this information with teachers.

❏ Use the NYU Metro Center's **Culturally Responsive Curriculum Scorecard** to assess cultural responsiveness and adapt materials to better meet students' needs.

❏ Prepare teachers to work collaboratively to adapt materials. Administrators should expect to carve out time in teachers' schedules for this work throughout the school year. Teachers can use the **Culturally Responsive Curriculum Scorecard Toolkit** for guidance on where to get started.

❏ Use assessments provided within instructional materials to diagnose unfinished learning.

❏ Support educators' use of just-in-time scaffolds provided within instructional materials. During team meetings, ask teachers to reflect on the scaffolds they've used to facilitate access to rigorous content. Use reflection as an opportunity to spread effective practice across classrooms.

❏ Schedule time for educators to visit teacher leaders' classrooms to see just-in-time scaffolds in action.

If You Do Not Currently Use High-Quality Instructional Materials

❏ Begin the process of selecting high-quality instructional materials. Review the **Instruction Partners Curriculum Support Guide**. If you'd like support through the curriculum selection process, apply to join **DESE's Evaluation and Selection Network**.

❏ Keep equity at the center of the curriculum selection process. Use the NYU Metro Center's **Culturally Responsive Curriculum Scorecard** when reviewing and selecting a curriculum. It is important to note that no curriculum will meet the needs of all students. After selecting high-quality materials, teachers should expect to make adaptations. The extent of such adaptations will vary across schools and programs.

❏ Partner with educators to adapt the materials you currently use. Reference **CURATE** and **EdReports** to determine specific areas where materials fall short. Set aside time in teachers' schedules to work collaboratively to strengthen materials. This includes a central focus on ensuring that materials are responsive to students' diverse cultures.

- ❏ Administer a beginning-of-year diagnostic assessment focused on the most critical prerequisite content at each grade level. Refer to the Actionable Data section for guidance on particular tools. Resist the urge to over-assess students. This takes up valuable time that could be better spent on strengthening student-teacher relationships and delivering grade-appropriate instruction.
- ❏ Develop a plan to assess unfinished learning in the context of grade-appropriate instruction. This includes using 1-2 problems from last year's instructional materials to assess prerequisite content right before a lesson takes place. Assessment can take place on paper, digitally, or via a student-teacher discussion.
- ❏ Ensure that all teachers understand differences in unfinished learning -including the fact that not all unfinished learning presents a barrier to grade-level content. Begin by reading this **Achievement Network blog post** as a team. It provides guidance on moving towards a just-in-time scaffolding approach.
- ❏ Provide effective, content-focused professional learning. Begin by moving away from "sit and get" PD towards a more active and empowering model. This includes asking teacher leaders and instructional coaches to visit colleagues' classrooms to model effective instruction. After these sessions, teachers should have an opportunity to try the instructional strategy and reflect with team members.

FOR TEACHERS

If You Already Use High-Quality Instructional Materials
- ❏ Continue to follow your high-quality curriculum. Focus your efforts on implementing just-in-time scaffolds, rather than reteaching previous-grade content.
- ❏ If you don't already have them, advocate for grade-level team meetings at your school. These meetings provide valuable time for educators to share strategies and support their colleagues' work. For example, educators can spend time discussing culturally relevant scaffolds that help English learners access grade-level texts and tasks.
- ❏ Adapt your curriculum where necessary to support your students' needs. Reference the example from P.S. 63 STAR Academy, included in this **toolkit**, for a description of how a teacher team adapted existing materials to make them more culturally responsive.
- ❏ Use informal assessments to diagnose unfinished learning. Refer to the strategies in the Actionable Data section, including using warm-up problems and student conversations to gather information.
- ❏ Take time to reflect on the just-in-time scaffolds that you're using in your classroom. Meet with your colleagues to discuss scaffolds that are working well and areas where you need additional support. Visit each other's classrooms to gather ideas and provide peer feedback.

If You Do Not Currently High-Quality Instructional Materials
- ❏ Partner with your colleagues and administrators to select high-quality instructional materials. Teacher voice is critical on curriculum selection teams.

❏ Avoid reteaching content from previous grade levels except in cases where it is absolutely necessary. Refer to **this article** for guidance on differentiating between unfinished learning that requires reteaching and unfinished learning that can be addressed via grade-appropriate scaffolding.

❏ If you don't already have them, advocate for grade-level team meetings at your school. These meetings provide valuable time for educators to share strategies and support their colleagues' work. For example, educators can spend time discussing culturally relevant scaffolds that help English learners access grade-level texts and tasks.

❏ Adapt your current curriculum to support your students' needs. Reference the example from P.S. 63 STAR Academy, included in this **toolkit**, for a description of how a teacher team adapted existing materials to make them more culturally responsive.

❏ Use informal assessments to diagnose unfinished learning. Refer to the strategies in the *Actionable Data* section, including using warm-up problems and student conversations to gather information.

❏ Take time to reflect on the just-in-time scaffolds that you're using in your classroom. Meet with your colleagues to discuss scaffolds that are working well and areas where you need additional support. Visit each other's classrooms to gather ideas and provide peer feedback.

GOING DEEPER

This section includes resources to support further learning.

HIGH-QUALITY INSTRUCTIONAL MATERIALS

1. **Quick Reference Guide: Assessing Your Curriculum Landscape**, Massachusetts Department of Elementary and Secondary Education
2. **Curriculum Ratings by Teachers**, Massachusetts Department of Elementary and Secondary Education
3. **Curriculum Support Guide**, Instruction Partners
4. **Culturally Responsive Curriculum Scorecard**, NYU Metro Center
5. **Reports Center**, EdReports
6. **Planning and Adjusting Instruction Webinars**, Massachusetts Department of Elementary and Secondary Education

EFFECTIVE PROFESSIONAL LEARNING

7. **Effective Teacher Professional Development**, Learning Policy Institute
8. **Creating Effective Professional Learning Communities**, Edutopia
9. **Curriculum Support Guide Workbook**, Instruction Partners

DATA AND ASSESSMENT

10. **Using Student Achievement Data to Support Instructional Decision Making**, What Works Clearinghouse
11. **Culturally Responsive Assessment Practices**, NCTE
12. **Learning Acceleration Guide**, TNTP
13. **Early Literacy Screening Assessments**, Massachusetts Department of Elementary and Secondary Education

GRADE-APPROPRIATE SUPPORTS

14. **Implicit Bias Resources**, Racial Equity Tools
15. **Unfinished Learning blog post**, Achievement Network
16. **When Students Go Back to School...,** The 74

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