



Improving student learning
through formative assessment

In 2018, leading education nonprofits AdvancED and Measured Progress came together. With more than a century of experience in accreditation and school improvement and decades of leadership in student assessment solutions, the new organization—Cognia™—brings institutions around the world a new, holistic way to view school performance and student achievement.

The activities described in this paper were carried out before the merger by Measured Progress in partnership with the institutions described. We've retained references to Measured Progress to avoid confusion.

A photograph of a classroom setting. In the foreground, a woman with long, wavy brown hair, wearing a black blazer over a grey top, is seated at a desk. She is looking down at a piece of paper and holding a red marker. To her right, a young girl with dark hair tied in a ponytail, wearing a grey and black jacket, is also looking at the paper. The desk is cluttered with papers and a blue folder. In the background, there are whiteboards and a large pink poster with handwritten text.

CASE STUDY

Boston Public Schools:

Improving student learning through formative assessment



It's all about student learning.

IN keeping with Boston's history as the birthplace of public education in this nation, Boston Public Schools (BPS) is committed to transforming the lives of all children through exemplary teaching in a world-class system of innovative and welcoming schools. In 2016, leaders in the school system identified a challenge: It was difficult to assess student learning consistently and accurately for 125 different schools because teachers use different curricula and pacing for each grade.

Boston schools needed formative assessments that could address the different curricula and pacing, and provide comparable measurement aligned to the common standards.

During the summer of 2016, the district sent out a Request For Proposals (RFP) for high-quality assessment resources that could be used at the district, school, and classroom levels to improve student learning.

Specifically, they were looking for

- Interim assessments* that could be administered three times a year to students in grades 3 through 12 in both English language arts (ELA) and mathematics during the 2016–2017 school year
- Customized test designs to match different curricula and testing models
- Online test administration with clear reporting
- Resulting data that could help differentiate instructional support for students, create targeted classroom instruction, and plan potential curriculum changes

Following the RFP and proposal evaluation process, BPS chose Measured Progress to design and construct these customized assessments, and Illuminate Education® to deliver them. Working together, the team committed to administer three customized interim assessments and provide professional development during the first year of the agreement.

By the end of the first year of implementation, teachers have already used feedback and evidence to identify instructional adjustments that can help students reach grade-level expectations. Administrators also utilized data to support long-range goals of the district: **to equip students with the skills they need as future community leaders, and to support teachers in a deeper analysis of student learning.**

*Educators use different terms for assessments that measure recent instruction. See our [Balanced Assessment System infographic](#) for more information on assessment terminology.

“In order to ensure that educators in the Boston Public Schools have access to high-quality assessments to inform educator practice and next steps with individual students, we selected Measured Progress.”

—Nicole Wagner Lam, Executive Director, Office of Data and Accountability, RFP Review Panel, Boston Public Schools



The challenge: multiple curricula

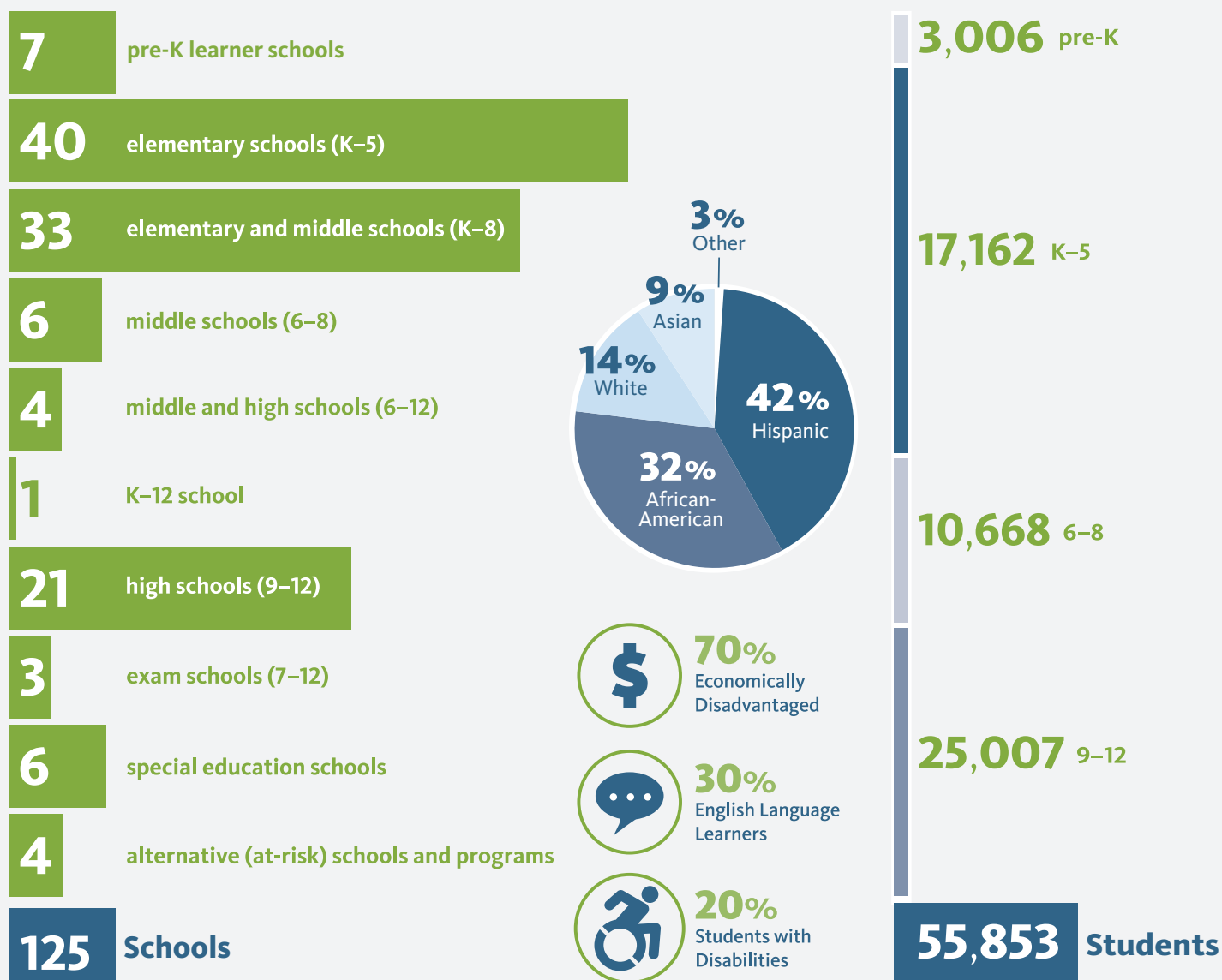
Boston district leaders needed a set of assessments that could support different curricula and pacing in place for different grades, while still measuring all students' progress toward grade-level standards. The assessments needed to be aligned to state standards—the Massachusetts Curriculum Frameworks—and to provide the same level of rigor that students would be expected to demonstrate on state accountability tests. Moreover, the assessments needed to be fair and equitable for all students.

Off-the-shelf assessment solutions did not offer the type of high-quality, culturally relevant items that would allow Boston Public Schools to get a true picture of how well students were grasping key standards in English language arts and mathematics.

Project Requirements

- Deliver high-quality, customized assessments for grades 3–12
- Cover ELA and mathematics
- Align with Massachusetts Curriculum Frameworks
- Assess recently taught material from multiple curricula
- Provide meaningful data to support classroom instruction
- Offer online and paper delivery options with online data and reporting
- Foster a climate of high expectations for student achievement

About Boston Public Schools



The solution: customized assessments

Michael Rubino, Formative Assessment Manager in the Office of Data and Accountability, and a key leader of the Boston project, explained why Boston Public Schools selected Measured Progress to create the assessments needed for this project.

“The quality of the content, the company’s reputation as being a good partner to districts, and the staff’s understanding of the Common Core and the Massachusetts Curriculum Frameworks really made Measured Progress stand out,” Rubino explained.

Customized test construction

Measured Progress provided customized test construction—the selection and sequence of assessment items—to deliver aligned and rigorous assessments that match the curricula and pacing used to support personalized learning for students in different Boston classrooms. The tests inform key questions about whether the multiple curricula are working:

- What types of evidence do we have?
- What data do we need to better understand?
- Are students making progress?

For ELA and math, Measured Progress created three forms per grade per curricula, to be administered in the fall, winter, and spring.

Each assessment includes a mix of selected-response and open-response items, including evidence-based selected response (EBSR) items that probe higher-order thinking skills. Online tests also include technology-enhanced items that use interactions such as matching, drag and drop, and drop-down.

Each test is designed to last approximately 50 minutes. Tests are scored with a mix of computer- and teacher-grading.

ELA forms have one informational text passage set and one literary/story narrative, both from authentic, previously-published texts. Each ELA form also includes a text-dependent prose constructed-response item.

Math assessments include 15–20 percent constructed-response and/or technology-enhanced items.



Alignment with state standards and accountability assessments

Measured Progress is the state's vendor for the Next-Generation Massachusetts Comprehensive Assessment System (MCAS), the accountability assessment for grades 3–12. Knowing that the BPS program would be consistent with the statewide program in approach and quality—with the same item types and level of rigor—solidified Boston's decision to work with Measured Progress.

Attention to equity

Equity is an important part of the district's strategic plan for this year, which extends to assessment, Rubino explained.

Working together with Measured Progress, educators from across BPS were able to help select material appropriate

for their students. “We wanted to make sure that our Academics and Special Education departments, classroom teachers, and those working with English language learners all had the opportunity to read through passages and have a conversation with test developers,” explains Wagner Lam. “We wanted to be able to help develop questions and provide our feedback,” said Rubino.

The district wanted to ensure equity for all students, and also equity for schools. Rubino continued, “through this customized assessment program, all schools have access to high-quality items, regardless of their budgets.”

Supporting instruction with additional resources

As part of the arrangement with Measured Progress, teachers have access to a collection of additional items and item types through the Measured Progress **Formative Content Bank** for ELA and mathematics.

Teachers can use these resources at their discretion through the Illuminate platform to support their formative assessment practices in the classroom. The online delivery of resources helps teachers identify concepts that students still need to work on, and gather evidence of student understanding as instruction occurs. Implementing the Illuminate platform and making the high-quality content available was crucial to Boston's goal of customization.

“Items are rigorous and culturally relevant to our students.” —Mike Rubino

Boston's Curriculum and Assessment Program

Boston administers the custom assessments three times a year, in the fall, winter and spring. Boston will add grade 2 and additional high school math assessments for the 2017–18 school year. The additional math curricula covered will include Everyday Math (EM4) for elementary and Integrated Math for high school. Here is what they did in 2016–17.

Grade /Course	ELA Levels	Math Curriculum	
3	Lexile 420–820	Investigations3	EngageNY
4	Lexile 740–1010	Investigations3	EngageNY
5	Lexile 740–1010	Investigations3	EngageNY
6–8	Lexile 925–1185	CMP3	
9–11	Lexile 1050–1385		
Algebra I		CME	Glencoe
Algebra II			
Geometry			

Keys to Success

More than 46 schools participated in the voluntary administrations of Boston's custom assessments. Administrations occurred in October, February, and April, with increasing numbers of schools participating in each test session, and assessing more than 25 percent of the district's third through sixth graders at its peak. Reflecting on the gradual phase-in approach, Rubino and his team identified several notable aspects of the initial experience.

Gradual implementation

The superintendent and his senior leadership team decided not to require all schools to use the BPS customized assessments during the first year. The idea was that early implementers can lead the way to show how the data can inform instructional decisions. The phase-in also allowed some teachers and students to experience the online platform before it was rolled out citywide.

"The goal is really to improve instruction, with the gradual rollout of customized assessments now available to give us concrete data," Rubino explains.

One team: Curriculum, assessment, and technology

Implementation of the new online platform was easier than the district anticipated, thanks to a concentrated effort to involve multiple stakeholders

early in the process. In October 2016, Boston Public Schools, Measured Progress, and Illuminate staff held eight different meetings for principals to explain the partnership and the project.

"It's a very seamless relationship in terms of working together with Measured Progress," says Wagner Lam. "Their attitude," adds Rubino, is always "How can we best support you and your students?"

The kickoff sessions outlined test designs and provided a synopsis of the reasons and rationale for high-quality assessments. Principals saw how high-quality content flowed into clear data reporting on the Illuminate platform. A unified team of Measured Progress experts, technology support specialists, and Boston curriculum and assessment staff all worked together to ensure that the training was meaningful and successfully communicated key information.

Exposing students to technology for skill building and confidence

Technology was a critical success factor in the project. "The key is to prepare students for the technology-based world. There is a concern that technology is increasing the achievement gap," Rubino said. "We want to close that gap." The online format of the new assessments gives all students exposure and practice working in an online environment. This exposure will serve them well, as Massachusetts students will also be required to take MCAS online in 2019. Students gained confidence in keyboarding skills, navigating an online test, and reading lengthy passages that required scrolling.

Rapid response to reporting realizations

One of the early "aha" moments after the first administration was the realization that teachers weren't quite sure what to do with the reporting results, even though they were enthusiastic about receiving data. In response, Boston Public Schools set up 20 professional development sessions: 10 on data analysis and 10 targeted to specific schools that hadn't previously used data systematically.

During those sessions, the Office of Data and Accountability team devoted time to showing teachers how to use the assessment data to support potential classroom shifts in instruction. As a result, teachers are set up to move from merely grading assessments to having a deeper lens into their students' learning.

Match assessment use to purpose for curriculum decisions

The new customized assessments are at the right level of rigor for each grade level and tightly aligned to state standards. With these assessments now in place, the district is ready to push the conversation beyond individual student learning. Now district leaders can look at the broader curriculum questions. For example, they can use the data to inform potential pacing changes recommended by instructional coaches or to identify grade-level gaps at the district level. "Now that the rigor level is correct, we can adjust the curriculum, technology, and teacher support services to get everything lined up," says Rubino.

He continues, "We will be thinking about the quality of our curriculum and how that will drive teacher professional development. As opposed to using the assessments solely as a gauge of how our students are doing, we can now also use the data to explore *why* students are performing at particular levels."



What's Next?

Before the end of the 2016–17 school year, the BPS team was already thinking about the program's implications for the future.

Target professional development

Rubino explains, "Now we know what we need to work on with students and provide for teachers." He's working with the academic team to determine what types of additional professional development the district can offer to make sure that teachers have the academic tools they need to help their students reach grade-level expectations.

Solidify curriculum recommendations

Rubino continues, "We are working with teacher leaders and the Academics Department to solidify curriculum recommendations that will drive test design revisions for next year. Once we agree on changes to the curriculum, scope, and sequence based on assessment data, then we can create evolved tests that fit those windows and criteria even closer."

Pilot performance tasks and science content

The partnership between BPS and Measured Progress extends beyond the customized assessment project. BPS has also piloted cognitively demanding end-of-year performance tasks from Measured Progress, to provide insight into how well the tasks measure higher-order thinking and skills that can't easily be demonstrated with traditional tests.

The district is also piloting the Measured Progress **STEM Gauge**® science resources for elementary and middle school students. These resources support classroom instruction in the transition to the Next Generation Science Standards (NGSS)* and to the Massachusetts Science and Technology/Engineering (STE) Curriculum Framework.

Boston leaders, Illuminate, and Measured Progress all look forward to the evolution of the project and supporting a strong learning environment for all Boston students.



7. **Question** DD Item In Use **CCSS.Math.Practice.MP1, CCSS.Math.Content.6.G.A.1**

Carlos drew a rectangle. He shaded $\frac{1}{2}$ of the rectangle. The shaded part of the rectangle has an area of 25 square feet.

Drag the correct length to the diagram.

5 feet

5 feet 12.5 feet 25.5 feet 50 feet

10 feet

Practice

Rubric [\[Hide\]](#) **1 Point(s)**

Carlos drew a rectangle. He shaded $\frac{1}{2}$ of the rectangle. The shaded part of the rectangle has an area of 25 square feet.

The Illuminate Education Intelligence Platform delivers customized assessments built by Measured Progress for Boston Public Schools.

Illuminate works with more than 1,600 districts nationwide in 45 states. Its award-winning Education Intelligence Platform is an online delivery platform that features data, assessments, assessment creation, student information, special education, and flexible reporting. Illuminate delivers Measured Progress content and provides reporting for BPS.

The platform also offers a single dashboard for all Boston assessment data—not just from these assessments. Boston schools have the option for custom reporting of other BPS assessments all in one place.

Illuminate's tools help Boston educators promote student achievement and success.

About Cognia

Cognia™ is a global nonprofit that has the knowledge to help schools improve. Cognia offers accreditation and certification, assessment, professional learning, and improvement services. The result of the merger of AdvancED and Measured Progress, Cognia was formed to bridge the gap between school evaluation and student assessment. We are the largest education improvement organization in the world and an undeniable force for enhancing schools, engaging students, and driving better outcomes for all.

Find out more at cognia.org.



cognia.org