Student Opportunity Act Plan

Brookline

# Commitment 1: Focusing on Student Subgroups

*Student subgroups requiring focused support to ensure all students achieve at high levels in school and are successfully prepared for life.*

* English learners and former English learners
* Students with disabilities
* Low income/economically disadvantaged students
* African American/Black students
* Hispanic or Latinx students

*The rationale for selecting these student subgroups.*

The mission of the Public Schools of Brookline is to ensure that every student develops the skills and knowledge to pursue a productive and fulfilling life, to participate thoughtfully in a democracy, and succeed in a diverse and evolving global society. However, it has been clear over the past eight to ten years that not all student groups have experienced the same level of achievement and success. Based on a review of the legacy MCAS mathematics assessment for students in grades 3-8 from 2011 to 2016, the achievement gap between Black/African American students and White students ranged between 40-43 percentage points (% Proficient/Advanced). The gap at the high school level for this same assessment over the same time period was 29 percentage points (%Proficient/Advanced). When reviewing the results of the Next Generation MCAS, these gaps continue to persist across all of our marginalized subgroups. The most recent assessment (spring 2019) showed 31% of students with disabilities Meeting or Exceeding Expectations on the math assessment compared to 83% of students without a disability (grade 10). Similarly, in grade 10, 0% of African American students scored Exceeding Expectations on the math assessment compared to 33% Asian students. These same gaps appear when looking at the Next Generation mathematics MCAS results in grades 3-8 for English Learners and Economically Disadvantaged students. Digging further, we see these gaps happening across most indicators we are measuring in the district (chronic absenteeism, AP course enrollment, recommendations for high school courses, discipline, etc.). These gaps have been present in the district for a while now, and while we have programs in place that specifically serve the needs of these populations, we feel that a focus on Tier 1 instruction is necessary if any significant gap closing is going to take place. We would like to focus on Tier 1 mathematics as we move into our second year with a new curriculum 6-8 and first year K-5 with professional development and Tier 1 instructional focus that goes along with the programs.

**Commitment 2: Using Evidence-Based Programs to Close Gaps**

Focus Area 1: Supporting educators to implement high-quality, aligned curriculum (E and F)

The previous primary math curricular resources utilized in the district were adopted prior to changes made in the state standards in 2011 and updated in 2017. Over time various resources were introduced to address areas in these new expectations that were not sufficiently met with the existing curriculum. This resulted in a student experience across classrooms, grades and schools that was not coherent.

The district has now adopted the Illustrative Mathematics (IM) curriculum for grades 6-8. Driven by student discourse, IM Certified™ curricula are rich, engaging core programs built around focus, coherence, and rigor. The curricula are trusted, expert-authored materials developed to equip all students to thrive in mathematics.

The district will also begin the adoption of the Investigations 3 math curriculum in the 2020-2021 school year. Investigations 3 is a focused, coherent, and rigorous K-5 mathematics curriculum. Fully aligned to the content and practice standards of the Common Core State Standards (CCSS), deep and careful attention is paid to mathematics content and to student thinking and understanding. Making sense of mathematics is the heart of the work, for students and teachers

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|  | **FY21 budget item** | **Amount: enter number, do not use the $ character** | **Foundation Category** |
| **1** | **Materials and resources for grade K-5 teachers (curriculum packages, student workbooks, assessments, subscriptions to digital courses for teachers and students)** | **123,000** | **Instructional Materials, Equipment, and Technology** |
| **2** | **Curriculum implementation courses and workshops for K-5 teachers and ongoing monthly professional development support for Math Specialists supporting teachers teams** | **36,000** | **Professional Development** |
| **3** | **Student supplies and materials to support the implementation of new curriculum K-8 (math manipulatives, card packs)** | **36,000** | **Instructional Materials, Equipment, and Technology** |
| **4** | **Books, materials and online access for students in grades 6-8** | **35,000** | **Instructional Materials, Equipment, and Technology** |

**Commitment 3: Monitoring Success with Outcome Metrics and Targets**

*Outcome metrics that will be used to measure progress in closing gaps for selected student groups.*

* Student Achievement: Mathematics achievement as measured by average scaled scores on MCAS
* Student Growth: Mathematics mean student growth percentile (SGP)
* Custom District Metric 1: Decrease number/percent of students receiving math intervention outside of the classroom (beginning and end of year)
* Custom District Metric 2: Number/percent of students "on grade level" in the beginning of year math assessment (beginning of year to beginning of year)

**Commitment 4: Engaging All Families**

*District plans for ensuring that all families, particularly those representing identified student subgroups most in need of support, have access to meaningful engagement regarding their students’ needs.*

PK-8 Math Program Review:

The district is in the middle of conducting a four phase PK-grade 8 Math Program Review (MPR) Phase I: Study and Vision; Phase II: Plan; Phase III: Implement; and Phase IV: Analyze. As part of the review process, the district reached out to all families and created a program review committee with representative parents from most of our K-8 Schools and grade levels. The Deputy Superintendent of Teaching and Learning was careful to balance families in terms of their experiences, backgrounds, children's ages and school placements. Over the past two years, our parents provided monthly input into studying the data and developing a vision for Phase I and for the review process planning in Phase II. In addition, guided by our committee's parent input, as part of the MPR process, all PSB parents were able to fill out a survey asking them about their experiences and expectations of PK-grade 8 math education in the PSB. We also surveyed the entire 7th grade class of students about their experience of math education and their expectations including what they liked and didn't like about learning math in the PSB. A outside researcher also specifically reached out to our families representing the subgroups of students most in need of support and met in a number of one hour focus groups to gather qualitative and quantitative data to inform the understanding of the experiences and expectations of those families. This data proved invaluable in guiding the Phase I and II part of the Math Review Process. We will continue to meet with our Committee through all four phases of the process to keep them informed of progress, to gather input and have them be part of charting our course forward.

Another way we continue to engage our parents is educating them about the new math curricula we rolled out this year in grade 6-8 and about the curriculum materials review process to choose a new K-5 math curriculum. The curriculum adopted in grades 6-8 (Illustrative Mathematics) has accessible online resources for families to help them understand the content their students are experiencing. The Investigations 3 Curriculum includes family newsletters to explain the content in each unit with suggestions of ways to support math learning at home.

We have also piloted a number of Math nights at one of our K-8 schools that has become a model for other schools in the district, and there is a plan to roll out math nights at our other schools based on that model.

Lastly, our math coordinator has also been a part of monthly Parent Teacher organization coffees, where she has presented on the new math curricula and educated parents about what to expect to see students working on and how to best support them.

Essential Curriculum in the Public Schools of Brookline:

For the past three years, under the leadership of the Deputy Superintendent of Teaching and Learning,

The PSB has engaged with its K-12 curriculum coordinators to vision, define and articulate an essential, "guaranteed" curriculum and learning experiences that all PSB students will have by the time they graduate from the district. The purpose of this work is to ensure that all of our students, especially our most vulnerable learners, will have access to a high quality, relevant, engaging and purposeful public school education. This is important and slow moving work.

Thus far, almost the entire district staff have participated in Portrait of a Graduate visioning, where staff members determine from a list of qualities and dispositions those elements that are most essential for graduates to have by the time they graduate from their public school experience. We have also started to engage some of our parents. There are plans to reach out

Curriculum coordinators are working to determine with their teachers the "essential curriculum" using the state frameworks as a guide and culling from a vast collection of curricula developed by coordinators and teachers over the years. Coordinators are documenting the curricula by grade bands.

We have much work left to do to pull together this huge project, but are confident that when it is complete, it will provide a strong foundation to support teachers and students in teaching and learning and clearly communicate to parents the learning expectations, goals and outcomes from a PSB education.

**Certifications**

*Certification that stakeholders were engaged in accordance with the Student Opportunity Act.*

As summarized in the previous answer response:

* Math Program Review grades PK-8
* Development of essential curriculum
* Discussion with School Committee members in their Curriculum Subcommittee
* Discussion with School Committee members during full Committee meeting

(All School Committee meetings are subject to open meeting law and open to any member of the public. Full School Committee meetings are also broadcast LIVE and recorded for later viewing by Brookline Interactive Group)

*Certification that School Committee has voted (or is expected to vote on the district’s Student Opportunity Act Plan.*

Date of Approval: 06/11/2020