Milton Public Schools

Targeted District Review Report

March 2022

Contents

This document was prepared by the American Institutes for Research, in collaboration with the Massachusetts Department of Elementary and Secondary Education

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Published November 2022

Executive Summary

The Massachusetts Department of Elementary and Secondary Education (DESE) contracted with the American Institutes for Research® (AIR®) to conduct a targeted review of Milton Public Schools (hereafter, MPS) in March 2022. Data collection activities associated with the review focused on understanding how district systems, structures, and practices operate to support the district's continuous improvement efforts. The review focused on the three governance-centered standards (and related indicators) that DESE identified as being important components of district effectiveness.

All data collection procedures for this report took place during the 2021-2022 academic year. This year represents the third year affected by the global COVID-19 pandemic, which has had a significant impact on educational systems since March 2020. The districts reviewed during the 2021-2022 school year experienced school closures, significant illness among staff and students, shortages of instructional and noninstructional staff, transportation issues, and other challenges during the two preceding school years, and some of these challenges continued during 2021-2022 as these districts were reviewed. Site visit and report writing teams considered these factors as they collected data and wrote reports.

Leadership and Governance

Mr. James Jette became the MPS superintendent in summer 2021. The 2021-2022 school year was his first full year in the role, having served in an interim capacity during the 2020-2021 school year. He previously served in many roles during his more than 20 years in the district, including guidance counselor, assistant principal, and principal of Pierce Middle School and principal of Milton High School. The district office leaders include assistant superintendents or directors of curriculum and human resources; pupil personnel; business; information technology; and diversity, equity, and inclusion (DEI). The district is governed by a school committee composed of six members who are elected for staggered three-year terms.

MPS revised its strategic plan to prioritize personalized learning experiences, focusing on students' strengths, interests, and needs; safe and supportive learning environments; and equitable resources and support for students to help them achieve their postsecondary goals. In recent years, MPS established programs and processes for addressing inequity, such as reviewing disaggregated student data and creating targeted intervention programs. Multiple stakeholders reported a positive working relationship between the superintendent, the school committee, the teachers' association, and town managers.

Four observers, focused primarily on instruction in the classroom, visited MPS during the week of March 7, 2022. The observers conducted 65 observations in a random sample of classrooms across grade levels, focused on literacy, English language arts (ELA), and mathematics in six schools. The classroom observations were guided by the Teachstone Classroom Assessment Scoring System (CLASS) protocol, developed by the Center for Advanced Study of Teaching and Learning at the University of Virginia. Overall, in the K-5 grade band, instructional observations suggest generally strong emotional support, classroom organization, and student engagement (Grades 4-5) and mixed evidence of consistently rigorous instructional support. In the 6-8 and 9-12 grade bands,

instructional observations provide evidence of strong classroom organization and student engagement and mixed evidence of consistent emotional support and rigorous instructional support.

Human Resources and Professional Development

MPS's hiring policies and processes encourage the efficient and effective employment of qualified and diverse staff. The district's dedication to diversification of the workforce is demonstrated at every level of the recruitment and hiring structure, beginning with the networking and diversity-centered job fair, the culturally competent hiring process, and continuing education through extensive professional development opportunities designed to combat racism and hiring biases. The district also thoughtfully selects hiring committee members from diverse backgrounds and positions. In MPS, having staff represent the background of the communities they are serving is a high priority during staff assignment, along with consideration of district data that indicate where specific staff members are most needed. However, responding to the COVID-19 pandemic has required substantial attention from district leaders. As a result, teachers have not been receiving as many evaluations from leaders as they did prior to the pandemic. Teachers and principals also reported MPS's ability to recruit new staff has recently suffered despite their best recruitment attempts.

A review of the educator evaluation system, stored in TeachPoint, indicated that teachers received ratings and feedback on their performance based on the Standards and Indicators of Effective Practice. In a review of the written comments, educators received specific, actionable feedback approximately 50 percent to 67 percent of the time depending on the standard. A review of educator evaluation documents indicated that some but not all educators were developing student learning and professional practice SMART (specific, measurable, attainable, relevant, and timely) goals. Educators received ratings on progress toward their goals in the summative evaluations; a large majority (greater than 80 percent) of the reviewed evaluations contained student learning SMART goals and professional practice SMART goals.

Financial and Asset Management

In MPS, evidence indicates that adequate resources are provided, and the district has clearly documented its financial procedures. MPS has an annual operating budget of more than $50 million, which is more than the required net school spending. The district also has a formal preventive maintenance plan, which is maintained by the town's director of consolidated facilities and includes a schedule of anticipated facilities' needs. Participants described a structure in which school leaders submit work orders to address emerging maintenance needs directly to the town director of facilities. In general, interview participants reported strong relationships among district leaders, the school committee, and members of the town government related to both fiscal and capital management and planning.

Milton Public Schools: District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, targeted district reviews support local school districts in establishing or strengthening a cycle of continuous improvement. Reviews carefully consider the effectiveness of systemwide functions, referring to the six district standards used by DESE: Leadership and Governance, Curriculum and Instruction, Assessment, Human Resources and Professional Development, Student Support, and Financial and Asset Management.[1] The MPS review focused on the three governance-centered standards only: Leadership and Governance, Human Resources and Professional Development, and Financial and Asset Management. Reviews identify systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results. The design of the district review promotes district reflection on its own performance and potential next steps. In addition to providing information to each district reviewed, DESE uses review reports to identify resources and/or technical assistance to provide to the district.

Methodology

A district review team consisting of AIR staff members and subcontractors, with expertise in each district standard, reviews documentation and extant data before conducting an on-site visit. On-site data collection includes team members conducting interviews and focus group sessions with a wide range of stakeholders, including school committee members, teachers' association representatives, district and school administrators, teachers, students, and students' families. Team members also observe classroom instruction and collect data using the CLASS protocol.[2] Virtual interviews and focus groups also are conducted as needed. Following the site visit, the team members coded and analyzed the data to develop a set of objective findings. The team lead and multiple quality assurance reviewers, including DESE staff, then review the initial draft of the report. DESE staff provides recommendations for the district, based on the findings of strengths and areas of growth identified, before AIR finalizes and submits the report to DESE. DESE previews and then sends the report to the district for factual review before publishing it on the DESE website.

Site Visit

The site visit to MPS occurred during the week of March 7, 2022. The site visit included 12 hours of interviews and focus groups with approximately 46 stakeholders, including school committee members, district administrators, school staff, students, students' families, and teachers' association representatives. The review team conducted one teacher focus group with eight elementary-school teachers, eight middle-school teachers, and eight high-school teachers.

The site team conducted 65 observations of classroom instruction in six schools. Certified team members conducted instructional observations using the CLASS protocol.

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[1] DESE's District Standards and Indicators are at http://www.doe.mass.edu/accountability/district-review/district-standards-indicators.pdf.

[2] For more information on the CLASS protocol, visit https://teachstone.com/class/.

Additional information is in the appendices. Information about review activities and the site visit schedule are in Appendix A. Appendix B provides information about district enrollment, attendance, and expenditures. The Districtwide Instructional Observation Report is in Appendix C. Appendix D contains resources to support implementation of DESE's *District Standards and Indicators*. Lastly, Appendix E contains student performance data.

District Profile

Mr. James Jette became the MPS superintendent in summer 2021. The 2021-2022 school year was his first full year in the role, having served in an interim capacity during the 2020-2021 school year. The superintendent works closely with a district office staff that includes assistant superintendents or directors of curriculum and human resources, pupil personnel, business, information technology, and DEI. The district is governed by a school committee composed of six members who are elected for staggered three-year terms.

MPS has four elementary schools, one middle school, and one high school. In the 2021-2022 school year, there were approximately 317.5 teachers in the district and 4,355 students enrolled in the district's six schools. Table 1 provides an overview of student enrollment by school.

Table 1. Milton Public Schools: Schools, Type, Grades Served, and Student Enrollment, 2021-2022

School	Type	Grades served	Enrollment
Collicot Elementary School	Elementary school	K-5	612
Cunningham Elementary School	Elementary school	PK-5	609
Glover Elementary School	Elementary school	K-5	604
Milton High School	High school	9-12	1,127
Pierce Middle School	Middle school	6-8	957
Tucker Elementary School	Elementary school	PK-5	446
Totals			**4,355**

Note. Data as of October 1, 2021.

Student enrollment has increased by about 5 percent in the past five years (4,150 in 2017; 4,355 in 2022). Enrollment figures by race/ethnicity and high-need populations (i.e., students with disabilities, students who are economically disadvantaged, and English learners (ELs) and former ELs) compared with the state are in Tables B1 and B2 in Appendix B.

The total in-district per-pupil expenditure was similar to the median in-district per-pupil expenditure for K-12 districts of similar size in fiscal year 2020—$14,471 for Milton compared with $14,560 for similar districts, and less than average state spending per pupil ($16,963). Actual net school spending was greater than what is required by the Chapter 70 state education aid program, as shown in Table B4 in Appendix B.

Student Performance

The percentage of students meeting or exceeding expectations on the Next-Generation MCAS (Massachusetts Comprehensive Assessment System) is greater than the average state rate for all tested grades and subject areas. Tables 2-4 provide an overview of student performance in ELA, mathematics, and science by grade level between 2018 and 2021.

Table 2. Next-Generation MCAS ELA Percentage Meeting or Exceeding Expectations, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	381	75%	75%	65%	-10	51%	14
4	392	67%	79%	72%	5	49%	23
5	343	70%	68%	69%	-1	47%	22
6	335	65%	75%	70%	5	47%	23
7	307	47%	65%	53%	6	43%	10
8	303	60%	61%	57%	-3	41%	16
3-8	2,061	65%	71%	65%	0	46%	19
10	265	—	76%	78%	—	64%	14

Note. Data sourced from MCAS Tests of Spring 2021 Percent of Students at Each Achievement Level—Milton (01890000) (mass.edu) (2021).

Table 3. Next-Generation MCAS Mathematics Percentage Meeting or Exceeding Expectations, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	381	69%	60%	51%	-18	33%	18
4	391	74%	80%	65%	-9	33%	32
5	344	70%	74%	60%	-10	33%	27
6	335	60%	67%	38%	-22	33%	5
7	308	67%	65%	44%	-23	35%	9
8	303	61%	66%	40%	-21	32%	8
3-8	2,062	67%	69%	51%	-16	33%	18
10	265	—	74%	72%	—	52%	20

Note. Data sourced from MCAS Tests of Spring 2021 Percent of Students at Each Achievement Level—Milton (01890000) (mass.edu) (2021).

Table 4. MCAS Science Percentage Meeting or Exceeding Expectations in Grades 5 and 8, 2019-2021

Grade	N (2021)	2019	2020	2021	3-year change	State (2021)
5	344	68%	—	66%	-2	42%
8	270	62%	—	57%	-5	41%
5 and 8	614	65%	—	62%	-3	42%
10	—	—	—	—	—	—

Note. Grade 10 results for the spring 2021 Science and Technology/Engineering (STE) are not provided because students in the class of 2023 were not required to take the STE test. Information about Competency Determination requirements is available at https://www.doe.mass.edu/mcas/graduation.html. In 2019, 10th graders took the Legacy MCAS science test. Data sourced from MCAS Tests of Spring 2021 Percent of Students at Each Achievement Level—Milton (01890000) (mass.edu) (2021).

In addition, the district's four-year graduation rate[3] was 94.4 percent in 2021, which is greater than the state rate of 89.8 percent. The district's five-year graduation rate was 95.8 percent in 2020, which is greater than the state rate of 91 percent.

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[3] Cohort 2021 Graduation Rates -Milton (01890000) (mass.edu)

Leadership and Governance

The superintendent was in his first full year in 2021-2022, after serving in an interim capacity during the 2020-2021 school year. The district also is governed by a school committee comprising six members who are elected for staggered three-year terms. The district revised its strategic plan to prioritize personalized learning experiences, focusing on students' strengths, interests, and needs; safe and supportive learning environments; and equitable resources and support for students to help them achieve their postsecondary goals. In recent years, MPS established programs and processes for addressing inequity, such as reviewing disaggregated student data and creating targeted intervention programs. Multiple stakeholders reported a positive working relationship between the superintendent, the school committee, the teachers' association, and town managers.

The findings in Table 5 are based on an analysis of information obtained from documents such as academic reports; subcommittee reports on teaching and learning, and cultural competency; and the districtwide data review on student performance.

Table 5. Summary of Key Strengths and Areas for Growth: Leadership and Governance Standard

Indicator	Strengths	Areas for growth
School committee governance	■ Regularly reviewing disaggregated student data to identify areas of need ■ Engaging families in decision making ■ Soliciting feedback and input from parents and students ■ Trusting relationship between the school committee, the town, the teachers' association, and the superintendent	■ Systematic collaboration with the superintendent ■ Equal school representation in contract negotiations
District and school leadership	■ Maintaining appropriate lines of communication ■ Creating equitable, data-driven opportunities for students ■ Regularly and consistently reviewing and updating curriculum and instruction across content areas ■ Strategic use of staffing and budget autonomies	
District and school improvement planning	■ Engaging with multiple stakeholders to refine the district strategic plan ■ Strategic, ongoing refinement of the district and school improvement plans ■ Using longitudinal student data to identify strategies for improving outcomes for all students	
Budget development	■ Using student data to inform the cost-effectiveness of budgetary needs ■ Employing an open and collaborative budget development process ■ Monitoring the budget regularly ■ Allocating resources to support social-emotional learning initiatives and improve special education services	■ Technology not meeting the needs of students and teachers, including access and compatibility issues

School Committee Governance

It is apparent from both interviews with stakeholders and a review of documents that the school committee upholds its responsibilities under Massachusetts laws and regulations and serves as an advocate in the community for meeting students' needs. The school committee focuses on improving student outcomes and uses disaggregated student data to uncover needs among all students and groups of students in the district. There is an emphasis on increasing diversity and ensuring equity, as evidenced in data reports and recent budget narratives. Systems are in place for facilitating feedback and communication with the superintendent, the teachers' association, students, and the community.

The school committee has a system for assessing the superintendent's performance, as required by law. This system includes the superintendent creating a list of goals at the beginning of the year and the school committee conducting a midyear progress review and an end-of-the-year review. School committee leaders also rely on supplemental reports from administrative meetings and parent groups to inform their evaluation. However, because the superintendent was recently appointed, the school committee has not yet evaluated his performance and followed these procedures through a full school year. According to recent school committee meeting minutes, this evaluation is a current focus.

As evidenced in data reports for the school committee and recent budget presentations, school committee members regularly review disaggregated data to inform their decisions about priorities. The district's data analyst presents to the school committee data from assessments such as MCAS, SAT, Lexia RAPID, and i-Ready. School committee members and district leaders use formative assessment data to identify areas in which schools are struggling and to help with staffing assignments. Data retrieved from Massachusetts School Building Authority annual reports are used to inform building and facilities' needs. The consistent use of data to inform change is an area of strength.

According to community stakeholders, the school committee creates opportunities to engage families in decision-making processes and allows families to express their concerns, as also evidenced in school committee meeting minutes and agendas. Community-level stakeholders and school committee leaders also mentioned that although the school committee prioritizes members developing and sustaining a collaborative working relationship with the superintendent, they are still developing their working relationship with the new superintendent, so there is no standard procedure for communication and decision-making, which is an area for improvement.

The school committee provides opportunities for students to share meaningful input by having them serve as student representatives, as documented by the school committee meeting minutes. Community leaders stated and weekly joint finance meeting agendas illustrated that the school committee also promotes positive working relationships between town leaders and the district to carry out initiatives. Providing students and families opportunities to engage in decision-making processes and fostering a meaningful working relationship with municipal and district leaders are areas of strength.

Based on conversations with teachers and the negotiated teacher contract, the school committee operates transparently with the teachers' association during the collective bargaining process. The

school committee takes responsibility for securing adequate funding, as evidenced in the internal control manual of federal grants, and has a standard practice for overseeing the contract negotiation process. Teachers in multiple focus groups expressed concern about providing input on the process. As one teacher explained, one school had some limitations in terms of communicating with teachers' association members to ensure that they have an opportunity to provide their input for negotiations with the school committee, and this issue was largely a result of not having a representative from the school in the collective bargaining process. Equal school representation in the contract negotiation process is an area for growth in the contract negotiation process.

District and School Leadership

The district leadership team includes assistant superintendents or directors for curriculum and human resources, pupil personnel, business, information technology, and DEI and is led by a superintendent who just completed his first full year in the role. This team works closely with school leaders and the school committee to focus on student needs and school improvement.

The superintendent and school committee leaders reported that the district has taken concrete steps to close achievement gaps between students of color and their White peers. For example, to address the disparity in enrollment and completion of Advanced Placement courses, the district developed a program led by two teachers that provides readiness skills after school and during the summer to all students, especially students of color. Called the Calculus Project Program, the intent is that participating students will then be eligible to take and succeed in high-school-level calculus. School-level stakeholders reported in interviews that district and building leaders and teachers are using disaggregated student data to inform changes in practice that will decrease gaps by improving student outcomes. For example, the district is focusing on providing students with one-on-one, targeted support to meet academic or non-academic needs. The social-emotional learning committee, consisting of representatives from all schools at various levels, administered a survey called Intellispark for middle-school and high-school students. Based on the results, the committee started to meet with the students individually to address any social-emotional learning concerns that arose. According to the District Data Overview presentation for 2021-2022, pilot elementary-school screeners were conducted last spring and will continue during each assessment period. Data from the screeners inform the prioritization of meetings with students and the types of additional supports that students may need. School leaders also reported making a concerted effort to match elementary-school students with teachers who would best meet their needs based on social and emotional data. These efforts to create equitable, data-driven opportunities for students are an area of strength.

School leaders reported that they are conducting ongoing curricular reviews to ensure that they are consistently updating the curricula across all departments on a staggered schedule, not updating them all simultaneously. One leader explained the process as starting with discussions of their current curriculum: "What were the deficits? What were the benefits? Looking at other programs and then, not just looking at the materials, but also trialing lessons, coming back and then ultimately making a decision and implementing PD [professional development]." School leaders also highlighted the need to be mindful of when various content areas need of curriculum updates, sharing "there is a schedule so that we're not buying new curriculum in every content area, at every level, at the same time financially. It is relatively structured." Plans for this work also are mentioned in the curriculum meeting

agendas and common planning time schedules for all schools. These consistent reviews and revisions of curricula and instruction across content areas are an area of strength.

The superintendent maintains open communication with the school committee and other stakeholders, including offering recommendations based on education policies and the needs of the community's students. For example, the superintendent proposed a new calendar policy to accommodate all cultural and religious observances for students, as supported by the 2022-2023 MPS calendar. School committee members reported that much of the initiative for this discussion came from the superintendent's conversations with parents in the community and his awareness of the town becoming increasingly diverse. Multiple teachers and community members reported that the district demonstrates appropriate lines of internal and external communication by using a variety of methods, including social media, telephone calls, email, and meetings with community members and district leaders (e.g., district finance, the assistant superintendent, the director of pupil personnel, the superintendents for curriculum and human resources, school principals). Community members stated that the superintendent, as well as school-level leadership, demonstrate responsiveness to feedback from stakeholders, such as using results from surveys that gathered information on community stakeholders' cultural and religious observations, prior to making decisions about the calendar. Many pointed to this positive example. Still, several community members indicated that they would like more opportunities to provide feedback via surveys and to make sure that stakeholders at all school levels (elementary, middle, and high) have the ability to provide feedback. A strength of the district is the superintendent's adeptness at maintaining appropriate lines of communication with stakeholders and offering sound recommendations for educational policies.

School leaders also reported that they have strategically used staffing and budget autonomies to meet student needs and improve student outcomes. School-level stakeholders reported that school leaders provided an opportunity to identify and support students interested in pursuing teaching as a career through the Future Teachers of America club, which has been reinvigorated for high-school students with staff support. In addition, school leaders identified a need for an early learning and literacy coach for prekindergarten and kindergarten students based on student data and recently filled this role using grant funding. School leaders also expressed that they have proposed other new positions during the budget development process, using individual building data to identify student needs. The strategic use of staffing and budget autonomies between district and school leadership is an area of strength.

Classroom Instruction

As the superintendent promotes a culture of collaboration, trust, accountability, and joint responsibility for student learning among all district staff members and demonstrates instructional leadership by focusing on improving teacher practice and student learning outcomes, the district review examined classroom instruction through instructional observations. Four observers, focused primarily on instruction in the classroom, visited MPS during the week of March 7, 2022. The observers conducted 65 observations in a random sample of classrooms across grade levels, focused on literacy, ELA, and mathematics in six schools. The classroom observations were guided by the CLASS protocol. These observations were guided by three grade-band levels of CLASS protocols: K-3, Upper Elementary (4-5), and Secondary (6-12).

The K-3 protocol includes 10 classroom dimensions related to three domains: Emotional Support, Classroom Organization, and Instructional Support. The Upper Elementary and Secondary protocols include 11 classroom dimensions related to three domains: Emotional Support, Classroom Organization, and Instructional Support, in addition to Student Engagement. The three domains observed at all levels broadly are defined as follows:

- **Emotional Support.** Describes the social-emotional functioning of the classroom, including teacher-student relationships and responsiveness to social-emotional needs.
- **Classroom Organization.** Describes the management of students' behavior, time, and attention in the classroom.
- **Instructional Support.** Describes the efforts to support cognitive and language development, including cognitive demand of the assigned tasks, the focus on higher order thinking skills, and the use of process-oriented feedback.

When conducting a visit to a classroom, the observer rates each dimension (including Student Engagement) on a scale of 1 to 7. A rating of 1 or 2 (low range) indicates that the dimension was never or rarely evident during the visit. A rating of 3, 4, or 5 (middle range) indicates that the dimension was evident but not exhibited consistently or in a way that included all students. A rating of 6 or 7 (high range) indicates that the dimension was reflected in all or most classroom activities and in a way that included all or most students.

In MPS, ratings are provided across three grade bands: K-5, 6-8, and 9-12. For each grade band, ratings (out of 7.0) are provided across the overarching domains, as well as at individual dimensions within those domains. The full report of findings from observations conducted in MPS is in Appendix C, and summary results are in Tables 17, 18, and 19 in this appendix.

In summary, findings from the MPS observations were as follows:

- **Emotional Support.** Ratings fell at the high end of the middle range (5.3) in the K-5 grade band and in the middle range for the 6-8 and 9-12 grade bands (4.4 and 4.5, respectively).
- **Classroom Organization.** Ratings fell in the high range for the 6-8 and 9-12 grade bands (6.4 and 6.6, respectively) and just below the high range for the K-5 grade band (5.9).
- **Instructional Support.** Ratings fell in the middle range for all grade bands (3.8 or 3.9).
- **Student Engagement.** For Grade 4 and up, where student engagement was measured as an independent domain, ratings fell at the high end of the middle range for all grade bands (between 5.0 and 6.0).

Overall, in the K-5 grade band, instructional observations suggest generally strong emotional support, classroom organization, and student engagement (Grades 4-5) and mixed evidence of consistently rigorous instructional support. In the 6-8 and 9-12 grade bands, instructional observations provide evidence of strong classroom organization and student engagement and mixed evidence of consistent emotional support and rigorous instructional support.

District and School Improvement Planning

Stakeholder engagement in improvement planning was widely reported as a strength of the district and school planning approaches. According to interview and focus group respondents and meeting minutes, stakeholders across the district are actively involved in synthesizing the comprehensive district strategic plan; these stakeholders include the superintendent and the assistant superintendents; principals and assistant principals; curriculum coordinators; directors; committees such as the cultural competency committee; the site council comprising parents, community members, and principals; and various other organizations. Once vetted, the strategic plan is sent to the school committee for approval. This ongoing engagement with multiple stakeholders to refine the strategic plan is an area of strength.

School leaders and community members consistently reported that the district has implemented an ongoing and collaborative process for reflection on progress toward plan goals. School committee meeting minutes from January 2022 provided further supporting evidence, capturing information about members and other stakeholders discussing revisions and strategies to collaborate with a variety of stakeholder groups to further develop the plan. The most recent plan integrates strategies for addressing discrepancies in special education and professional development opportunities for staff about cultural competency and social-emotional learning. Other examples include strategies related to improving curriculum and instruction and student support. Priority areas and recommendations from the New England Association of Schools and Colleges 2019-2020 Self-Assessment and the 2020-2021 Collaborative Conference are referenced and aligned with each goal outlined in this improvement plan. Further, stakeholders receive an annual "data outcome sheet" that provides information about student progress toward key outcomes and strategic goals. Importantly, this includes information about progress toward eliminating disproportionality between student groups. The review of these data informs decisions about annual adjustments to the district improvement plan. These clear strategies for using feedback to identify priorities aimed at improving outcomes for all students are based on an analysis of longitudinal student data, which is an area of strength.

To develop school improvement plans, the school principals work with the site council, staff, and at the secondary level, student government representatives to develop their goals. Teachers reported that information from the New England Association of Schools and Colleges accreditation review and the district-level improvement plan also support the development of goals for school-level improvement plans. Each school develops an improvement plan aligned with the broader district's plan. For example, in the improvement plan for Milton High School, each goal aligns with an objective from the strategic plan, such as the school mission and vision priority area and the objective of assessing and improving school culture through collaborative processes. School leaders reported that they review and monitor the progress toward the goals outlined in the school improvement plans during school site council meetings each month and weekly meetings with the school's leadership team. Each strategy is aligned with performance indicators or measures, resources, and person(s) responsible, along with a timeline outlining the expected frequency of these strategies, which is used for internal monitoring of the school improvement plans. This intentional process for ongoing refinement of the strategic and school improvement plans is an area of strength. Including student

voice and representation during improvement planning, building school needs-based plans, and monitoring progress toward strategic goals are also strengths of the district.

Budget Development

District finance leaders reported that they create a needs-based budget composed of rollover budget requests and supplemental requests, such as budgetary needs in regular education, as part of the budget development process. The rollover requests, such as budgetary needs in special education, are considered contractual compared with the supplemental requests, and the needs must be supported by a review of data. The specific analyses depend on the nature of the request, but the district focuses on cost-effectiveness budgeting, anchoring decisions in strategies to improve student outcomes in behavior, attendance, and academic performance. Using student data to inform the cost-effectiveness of budgetary needs is an area of strength.

The school committee and district-level staff reported that the finance subcommittee meets once per week to track the status of the budget, review current spending, and review the reports they receive from the assistant superintendent for business. This activity is further supported by the finance subcommittee report section of the school committee meeting minutes. The regular monitoring of the budget is a strength. According to school leaders, the budget development process is open and collaborative in that they have an opportunity to provide their input on staffing requests, which can be considered another area of strength.

In 2017 and 2018, DESE cited MPS for disproportionalities in special education referrals for Black male students, and the response to these citations has shaped the district's budget and special education strategy. To address the overidentification of Black male students for special education services, who in some instances may be more appropriately served by social-emotional learning services, teachers, school leaders, and district leaders reported that the district is allocating funding toward scaling up programs such as the Bridge for Resilient Youth in Transition program, Compass software, and trauma-sensitive training for staff districtwide. These initiatives were prompted by the DESE citations and by student survey findings indicating a need for additional mental health supports and strengthening of adult–student relationships.

District and school leaders also developed budget and staffing plans based on the specific needs of students, as identified by their individualized education programs (IEPs). This means that determinations of how many specialized staff to hire to serve these students are based on students' needs, and, thus, changes across time. The allocation of staff and funding to improve special education and support social-emotional learning initiatives for all students based on student data is an area of strength.

The district's technology offerings posed challenges to effective teaching and learning according to school-level respondents. Teachers and students received Chromebooks for remote teaching and learning. However, many teachers reported experiencing compatibility issues with the Chromebook and needed to purchase their own computers. Community members also raised the issue of this technology not meeting the needs of students from low-income families in terms of making sure that they have internet access. Supporting teaching and learning through technology and the access of all students and teachers is as an area for improvement.

Recommendations

- District leadership, including the superintendent and the school committee, should develop a mutually agreed-upon process for systematic collaboration.

- District and school leadership should ensure that there is equal school representation in contract negotiations with the school committee.

- The district should develop processes and supports that address issues of access and compatibility related to district-provided technology.

Human Resources and Professional Development

MPS's hiring policies and processes encourage the efficient and effective employment of qualified and diverse staff. MPS's dedication to diversification of the workforce is demonstrated at every level of the recruitment and hiring structure, beginning with a networking and diversity-centered job fair, a culturally competent hiring process, and continuing education through extensive professional development opportunities designed to combat racism and hiring biases. The district also thoughtfully selects hiring committee members from diverse backgrounds and positions. In MPS, having staff represent the background of the communities they serve is a high priority during staff assignment, along with district data that indicate where specific staff members are most needed.

However, responding to the COVID-19 pandemic has required substantial attention from district leaders. As a result, teachers have not been receiving as many evaluations from leaders as they did prior to the pandemic. Teachers and principals also reported that MPS's ability to recruit new staff has recently suffered despite the district's best recruitment attempts.

Table 6 summarizes key strengths and areas for growth in human resources and professional development.

Table 6. Summary of Key Strengths and Areas for Growth: Human Resources and Professional Development Standard

Indicator	Strengths	Areas for growth
Infrastructure	■ Strategic student data dashboard	■ Documented and easily accessible employment information
Recruitment, hiring, and assignment	■ Incorporating antibias measures ■ Encouraging cultural competence in recruitment and hiring systems ■ Assigning teachers based on district data to match teachers' skill sets with student needs	■ Recovering hiring practices since the pandemic
Supervision, evaluation, and educator development	■ Abundant professional development opportunities ■ Robust mentoring program	■ Variability regarding evaluation feedback quality and timeliness ■ Professional development opportunities that contribute to license renewal
Recognition, leadership development, and advancement	■ Offers teacher leadership positions ■ Offers awards recognizing teacher excellence	

Infrastructure

To support staffing decisions based on student needs, MPS developed a strategic student data dashboard. District respondents and data presentations demonstrated that a range of school teams

and committees use this dashboard to quickly provide student information to drive staffing decisions. The dashboard includes student demographic data, assessment results, college enrollment, and athletics participation information. The development and use of the dashboard is a strength of the district.

Limited evidence exists to verify the accuracy of the district's employment record-keeping. Based on district-reported information and a review of the presented documentation, the primary employment data maintained in the system includes work schedule documents and stakeholder contact information.

Recruitment, Hiring, and Assignment

MPS implements multiple efforts to recruit staff and diversify the workforce to reflect district students; however, stakeholders reported consistent challenges in meeting staffing needs and pervasive shortages in the availability of staff since the pandemic. District stakeholders and district training documents show that MPS proactively cultivates a pipeline of educators to create a qualified pool of applicants for all vacancies, including a focus on diversifying the workforce. To this end, the district implemented processes, such as antibias trainings and hiring initiatives, to identify and address equitable access to excellent educators, while encouraging cultural competence and combatting hiring bias. Despite these efforts, teachers reported that the district was suffering from staff shortages that interfered with their mission to uphold diversity and employ effective educators.

MPS' primary strategies for recruitment include posting all available positions on SchoolSpring, hosting an annual job fair, participating in the Massachusetts Partnership for Diversity in Education, and recruiting from within the community through interested parents and engaging interested students in a teaching career through the Future Teachers Club. District leadership and the school committee also reported that the superintendent strategically uses staffing and budget autonomies to address priorities of diversifying the workforce and providing students with remote learning options. For example, to address the priority to diversify the educator workforce, the superintendent works with two antiracist groups, Citizens for a Diverse Milton and the Milton Anti-Racist Coalition, to host a diversity recruitment fair every year to recruit faculty members of color. In addition, the superintendent raised funds through the Mellon Foundation for Education to support a training program for teachers on how to effectively use technology to reach students remotely. Despite these efforts, school leaders and teachers reported challenges in filling positions during the pandemic, which made it even more challenging to diversify the workforce. As one principal summarized a commonly shared sentiment, "We can't [fully] staff the building. So, I truly believe that they [the district] would love to have a more diverse workforce and staff. I do think that would be a priority, but you really struggle to get anybody right now."

In addition to proactive recruitment efforts, MPS offers principals autonomy in hiring decisions and also uses a consistent hiring process that engages multiple perspectives and embeds antibias principles. Incorporating antibias measures and encouraging cultural competence in recruitment and hiring are strengths for MPS. All staff participated in a mandatory antibias training, and hiring committees purposefully engage multiple stakeholders, including staff, leaders, parents, and community members. Each position has a hiring committee that typically consists of teachers and family member volunteers as well as others with roles relevant to the position. These committees

recommend their candidates to the principal, who then reviews and submits the top candidates to the assistant superintendent for approval.

According to school leaders and teachers, hired staff are assigned to roles and classrooms based on student needs identified through a review of student data. Department heads make decisions on assignment and use a combination of student data and teacher preferences (gathered through sign-up forms) to inform these decisions. One example of this is when, as confirmed by respondents in the elementary school leaders focus group, MPS hired early learning and literacy coaches due to data-identified support needs for specified grades and groups of students. This resulted in a team model, that matches the students with teachers with the most appropriate skill set to meet the students' data-identified needs. As one school principal explained, "The teams, in general, have stayed intact over the years . . . [and] there's a concerted effort to match the students with teachers that would best suit their skill set." Using data to assign teachers whose skill sets match students' needs is a strength for the district.

School leaders and teachers also consistently reported MPS's efforts to match non-White teachers to schools with higher percentages of minority students to expose students to faculty who are more representative of the student population. Teachers also noted the number of students with IEPs in a class dictates staffing assignments, citing the need to have teachers with special education certifications providing required services to students with IEPs.

Supervision, Evaluation, and Educator Development

A review of the educator evaluation system, stored in TeachPoint, indicated that teachers received ratings and feedback on their performance based on the Standards and Indicators of Effective Practice. Simple random sampling was used to select 10 percent sample of the 370 Professional Teacher Status teachers (37 teachers) for the 2020-2021 school year. Of the 37 educator evaluations selected for review, 24 educators had summative evaluations available to review for the 2020-2021 school year. (Not all selected for review were required to have an evaluation during the 2020-2021 school year.) All summative teacher evaluations reviewed (100 percent) were marked as complete, but a small percentage of evaluations (17 percent) did not include required components, such as ratings for each standard. In addition, summative evaluations did not always include observation notes, a rationale for the rating, or feedback identifying strengths or areas for improvement. In a review of the written comments, educators received specific, actionable feedback approximately 50 percent to 67 percent of the time, depending on the standard. The review of educator evaluation documents indicated that some but not all educators were developing student learning and professional practice SMART goals. Educators received ratings on progress toward their goals in the summative evaluations; a large majority of the reviewed evaluations contained SMART goals: 87.5 percent for student learning and 83.3 percent for professional practice.

According to school leaders and teachers, evaluators conduct classroom observations and may set up time afterward to discuss how effectively they felt teachers implemented performance standards. The evaluations include multiple types of evidence on teacher performance uploaded into TeachPoint. Feedback must be given within 5 days of the evaluation, but teachers reported preferring receiving feedback sooner. According to teachers, the timing of feedback depends on the preferences and approach of the individual conducting the observation, and this variability is an area

for growth. Summative evaluation reports showed that teachers earn a rating of Exemplary, Proficient, Needing Improvement, or Unsatisfactory. Information from the evaluation is used to determine which teachers are placed on an improvement plan, resulting in multiple formal and informal observations and recommendations for additional resources for areas that need improvement. Principals also reported that, based on DESE feedback, a teacher with professional status does not have to undergo an evaluation unless there are performance concerns. However, during the COVID-19 pandemic, the superintendent and principals described difficulties providing "robust and timely" evaluations as they did in the past. District leaders described their role during the pandemic as, as one leader summarized, that of "triage nurses," which limited their ability to maintain the quality and number of evaluations.

A review of all summative evaluations for 2020-2021 for administrative staff revealed that eight of the 30 administrative staff had summative evaluations available for review. Of those eight evaluations, 87.5 percent (seven) were complete. All evaluations reviewed included performance ratings or assessments of progress toward goals. The review of evaluation documents also indicated that all of the administrator evaluations reviewed (100 percent) included a shared districtwide student learning goal and professional practice goal; however, none of the evaluations included school improvement SMART goals. Half of the evaluations (50 percent) included multiple sources of evidence to assess performance on summative evaluation standards. Almost all summative administrator evaluations (87.5 percent) reviewed included evaluator comments with specific, actionable feedback identifying administrators' strengths and areas for improvement.

To support the continued growth of staff, a strength for the district is the comprehensive professional development opportunities for teachers, as supported by a review of training materials and documents and reported by stakeholders. Professional development offerings align with the district's DEI goals and include antibias and antiracism trainings and topics related to cultural competency. Further, the cultural competency committee and the professional development committee are focused on building and promoting cultural competency throughout the district, according to stakeholders and reports. School and district leaders and school-level stakeholders cited multiple professional development opportunities for educators, such as the cultural competency committee, which includes teachers and administrators who collaborate about professional development opportunities and ensure cultural competency in curriculum and instruction. District staff reported, "they [the professional development committee] have to follow the guidelines of DESE's definition of high-quality professional development, so that's included with the request for a proposal." MPS also has a professional development day during which teachers meet to discuss grading policies and other topics and review their logged observations and recommendations. District leaders also used special education funding to hire a new restorative justice coach who is offering professional development opportunities for teachers. Teachers reported ongoing opportunities for professional development throughout the year, but they have limited opportunities for professional development that contribute to license renewal.

According to stakeholder reports and a review of mentorship leadership team documents, MPS has a robust mentoring program. The program includes regular meetings between teacher mentors and their mentees and follows DESE guidelines run by their mentoring leadership team made up of teachers who use a "train the trainer model." Teachers identified mentoring as a major source of

assistance when they are struggling: "[Mentors] can help you in terms of best practices. And they're here to just be a cheerleader for you, too." This is a strength for the district.

Recognition, Leadership Development, and Advancement

According to district leaders, principals, and teachers, MPS provides opportunities for growth and leadership positions. District staff reported that there are grade-level facilitators chosen from each grade level who demonstrate instructional leadership. The opportunity to lead professional development sessions is the primary source of recognition for teacher excellence. Teachers and principals consider presenting professional development strands as the primary opportunity for teachers to demonstrate their abilities in accordance with DESE guidelines. According to one school leader, "I think generally they're very worthy of the awards." When vacancies arise, leadership positions are first offered to existing MPS staff before being opened to outside applicants. Regarding teachers' award opportunities, principals noted their site councils acknowledge teachers' work with recognitions of excellence, such as a Vision Award and Teacher of the Year Award. These multiple avenues to recognize teachers' good work and offerings of leadership opportunities are areas of strength for the district.

Recommendations

- The district should establish a record-keeping system that houses all necessary employment information and documentation for district staff.

- The district should consider leveraging existing pipelines and other strategies in an effort to recover hiring practices impacted by the pandemic.

- District and school leaders should establish and implement a schedule for conducting classroom observations so that feedback is provided in a consistent and timely fashion.

- The district should continue to offer a variety of professional development opportunities, including offerings that contribute to educator license renewals.

Financial and Asset Management

Evidence indicates that MPS has adequate resources, and the district has clearly documented its financial procedures. MPS has an annual operating budget of more than $50 million, which is more than the required net school spending. The district also has a formal preventive maintenance plan, which is maintained by the town's director of consolidated facilities and includes a schedule of anticipated facilities' needs; school leaders submit work orders to address emerging maintenance needs directly to the town director of facilities. In general, interview participants reported strong relationships among district leaders, the school committee, and members of town government in relation to both fiscal and capital management and planning. Table 7 summarizes the key strengths and areas for growth for financial and asset management.

Table 7. Summary of Key Strengths and Areas for Growth: Financial and Asset Management Standard

Indicator	Strengths	Areas for growth
Budget documentation and reporting	■ Budget documents clearly and accurately communicate planned resource allocation	■ Explicitly linking funds to student outcomes ■ Including actual expenditures from previous years in budget documents
Adequate budget	■ More than required net school spending (34.7% over in 2021)	
Financial tracking, forecasting, controls, and audits	■ Clearly documented financial procedures for purchasing, grant management, personnel, and other fiscal needs	
Capital planning and facility maintenance	■ Formal preventive maintenance plan that informs capital and operating requests	■ Implementing strategies to address overcrowding in schools

Budget Documentation and Reporting

Budget documents[4] are clear, accurate, and user-friendly. Overall, budget documents contain sufficient detail for stakeholders to understand the current year's resource allocations, which is a strength of the district. The end-of-year reports include information about the allocation of resources and funding sources, including revolving funds and federal and state grants. Approved budget documents for the last three years list appropriations by department and include an abbreviated account description along with total requested funds (which is the sum of the "original," "transfers," and "carry forward" funds listed on that same line). The fiscal year (FY) 2023 budget narrative, which was presented to the school committee, includes allocations for various "DESE function codes" along with their corresponding FY2023 total needs-based request and proportion of the total budget. The information also includes a breakdown of the various funds that add up to the FY2023 total needs-based request (i.e., FY2022 total budget, FY2023 salary and nonsalary rollover costs, FY2023 priority 1-10 requests, FY2023 all other requests, FY2023 onetime requests). The presentation also includes a breakdown of

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[4] For comparison purposes, budget documents include historical budgets but not actual expenditures.

salaries, contractual (nonsalary), other nonsalary, and onetime curriculum costs, as well as tables displaying details of the "FY2023 school budget roll forward" funds.

The FY2023 budget narrative presentation listed the district's strategic goals and initiatives, as well as "immediate and future concerns." In addition, it included brief descriptions of the needs that will be addressed through the FY2023 onetime curriculum and the priority 1-10 and 11-17 staffing funding requests. Although the presentation listed student enrollment and achievement data (i.e., ELA and mathematics MCAS, Lexia, and i-Ready Screeners), it did not specifically link funds to student outcomes. Although the budget narrative presentation and the approved budget documents included current budgets (FY2022), they did not list previous years' actual expenditures for comparison purposes.

Regarding the town of Milton, district leaders stated that MPS has a municipal agreement with the town for the allocation of education expenses, but "it's not formally documented" yet. They explained that they are currently executing an agreement, but the town is revising some allocations (e.g., salaries and teacher's health insurance).

Adequate Budget

For FY2022, the town of Milton approved a budget of more than $52 million (not including revolving funds, state and federal grants, and capital funds), of which $43,087,519 covered salaries and wages and $9,650,800 covered general expenses (e.g., instructional supplies, technology infrastructure, transportation for students who are homeless, costs for staff to attend professional development). District leaders confirmed that the town provides sufficient general appropriation funds each year, as well as supplemental funds as needed (e.g., hiring reading and mathematics interventionists, pandemic-related costs) to meet or exceed required net school spending. As evidence, in FY2019, MPS's expenditures exceeded $59 million, whereas the required net school spending was set at less than $42 million.

Financial Tracking, Forecasting, Controls, and Audits

District leaders indicated that the business office submits quarterly financial reports to the superintendent, the school committee, and the finance subcommittee. Quarterly and end-of-year reports include comments on areas in which spending is over or under the expected levels and list the use of COVID-19 prevention funds, as well federal, state, and private grants. These reports are shared with principals and grant administrators.

District leaders reported that, historically, MPS has fully used grant funds, so none revert to the state. The business office regularly monitors grants and provides reports to grant administrators to ensure that the funds are spent within the required timelines. End-of-year reports indicate that the district does not overspend its approved budget. District leaders indicated that the town allows the district to carry forward surpluses, which is confirmed in the budget documents.

District leaders stated that the town's procurement officer, who holds Massachusetts Certified Public Purchasing Official Program certification, "assists the schools with bids," but some of the "smaller" bids are handled by the district's assistant superintendent of business affairs, with assistance of the

town's procurement officer as needed. Documentation provided by the district indicates that the district has clearly documented its financial procedures for purchasing, grant management, personnel, and other fiscal needs.

Capital Planning and Facility Maintenance

District leaders stated that MPS has a formal preventive maintenance plan, which includes a schedule of anticipated facilities' needs. The plan is maintained by the town's director of consolidated facilities, who uses it to inform capital and operating requests, which is an area of strength. When relevant needs emerge at the schools, principals and custodians contact the town director of facilities directly by telephone or submit work orders to address emerging maintenance needs.

The *FY23 Capital Budget Request* includes requests for funds to cover various maintenance-related expenses (e.g., preventive maintenance programs for heating, ventilation, and air-conditioning systems; pavement management program; gym flooring repair) as well as funds to address other current needs (e.g., theatrical lighting upgrades and fixture replacements for the high-school's auditorium, bidirectional antenna upgrades at two schools, resources for the conversion of educational spaces to address overcrowding needs at all schools).

District leaders indicated that buildings are accessible, clean, safe, well-lit, and well maintained. They also stated that the schools do not have accessibility problems and noted that MPS recently made "some improvements to various schools," such as installing lower handrails on staircases at one of the elementary schools to accommodate the needs of a student. They also said that the district's information technology director determines ongoing and future technology needs (e.g., replacing servers and tablets) and works closely with the assistant superintendent for business affairs to ensure that the operating budget covers the pertinent expenses.

District and school leaders stated that "due to increasing enrollment over the years," all schools are experiencing "overcrowding." In the past 10 years, enrollment in MPS has increased by 466 students, from 3,886 students in 2011 to 4,352 students in 2021. District leaders explained that, for the last three years, the school building committee has been assessing various options for addressing overcrowding issues (e.g., locations for building a new school, which grade levels would go into a new school) and holding forums to receive feedback from various stakeholders (e.g., school staff, parents, neighbors) to help inform decisions. They added that, as a temporary solution, the schools have been creating "makeshift classroom spaces" using capital appropriation funds. For example, at one elementary school, a portion of the library was separated with dividers and converted to a classroom for second graders. At another elementary school, the gym was "split in the middle with a curtain" to use the space for music class three days per week and physical education three days per week. At a different elementary school, the cafeteria's stage is now a music classroom, and musical instruments are stored in a closet rather than having them on display and easily accessible to students. At the middle school, the makerspace is now used as a digital classroom for the technology classes. The town's school building committee disseminated a YouTube video in which district and school staff detail some of the aforementioned challenges, as well as some approaches for addressing overcrowding issues.

According to district leaders, the town's director of consolidated facilities develops a list of the general building maintenance needs, and the district's information technology director develops a list of technology needs. They develop these lists every year in the fall for the next five fiscal years. This five-year capital plan is first reviewed by the superintendent and the assistant superintendent for business affairs, then by the finance subcommittee, the school committee, and finally the town's capital improvement planning committee. The FY2023-2027 capital plan forecasts facility maintenance and technology funding requests for five years, along with a breakdown of sites where the repairs or upgrades will be made. For example, various technology upgrades or replacements are projected for backup systems, network hardware, telephone systems, and end user devices. In addition, some of the facility projected fund requests include allocations for playground equipment upgrades, new roofing, and fire alarm upgrades. The total projected funding request for the next five years is $12,532,000 for facilities and $3,814,550 for technology-related expenses.

Recommendations

- The district should ensure that budget proposals and related reports explicitly link funds to student outcomes.
- The district should consider including actual expenditures from the previous years in current budget documents.
- The district should continue its consideration and implementation of strategies to address overcrowding in schools due to rising enrollment.

Appendix A: Summary of Site Visit Activities

The AIR team completed the following activities as part of the district review activities in MPS. The team conducted 65 classroom observations between March 8 and March 10, 2022, and held interviews and focus groups on March 8, 2022. The site visit team conducted interviews and focus groups with the following representatives from the school and the district:

- Superintendent
- District leader for finance
- District leader for human resources and professional development
- School committee members
- Teachers' association members
- Principals
- Teachers
- Support specialists
- Parents
- Town representative

The review team analyzed multiple datasets and reviewed numerous documents before and during the site visit, including the following:

- Student and school performance data, including achievement and growth, enrollment, graduation, dropout, retention, suspension, and attendance rates
- Data on the district's staffing and finances
- Published educational reports on the district by DESE, the New England Association of Schools and Colleges, and the former Office of Educational Quality and Accountability
- District documents such as district and school improvement plans, school committee policies, curriculum documents, summaries of student assessments, job descriptions, collective bargaining agreements, evaluation tools for staff, handbooks, school schedules, and the district's end-of-year financial reports
- All completed program and administrator evaluations and a random selection of completed teacher evaluations

Appendix B. Enrollment, Attendance, Expenditures

Table B1. Milton Public Schools: Student Enrollment by Race/Ethnicity, 2021-2022

Group	District	Percentage of total	State	Percentage of total
All	4,352	100.0%	911,529	100.0%
African American	573	13.2%	84,970	9.3%
Asian	345	7.9%	65,813	7.2%
Hispanic	243	5.6%	210,747	23.1%
Native American	7	0.2%	2,060	0.2%
White	2,934	67.4%	507,992	55.7%
Native Hawaiian	2	0.0%	788	0.1%
Multirace, Non-Hispanic	248	5.7%	39,159	4.3%

Note. Data as of October 1, 2021.

Table B2. Milton Public Schools: Student Enrollment by High-Need Populations, 2021-2022

Group	District			State		
	N	Percentage of high need	Percentage of district	N	Percentage of high need	Percentage of state
All students with high needs	1,288	100.0%	29.3%	512,242	100.0%	55.6%
Students with disabilities	748	58.1%	17.0%	174,505	34.1%	18.9%
Low-income households	630	48.9%	14.5%	399,140	77.9%	43.8%
ELs and former ELs	118	9.2%	2.7%	100,231	19.6%	11.0%

Note. Data as of October 1, 2021. District and state numbers and percentages for students with disabilities and high needs are calculated including students in out-of-district placements. Total district enrollment including students in out-of-district placement is 4,391; total state enrollment including students in out-of-district placement is 920,971.

Table B3. Milton Public Schools: Chronic Absence[a] Rates by Student Group, 2018-2021

Group	2018	2019	2020	2021	4-year change	State (2021)
All	4.6	4.8	5.6	6.4	1.8	17.7
African American/Black	7.4	8.3	7.6	13.7	6.3	24.1
Asian	3.3	1.6	1.6	3.9	0.6	7.2
Hispanic/Latino	8.2	9.2	11.3	19.7	11.5	29.0
Multirace, non-Hispanic/Latino	5.2	5.9	8.0	7.0	1.8	18.9
White	3.8	4.0	5.0	4.2	0.4	13.2

Group	2018	2019	2020	2021	4-year change	State (2021)
High need	7.9	8.7	9.7	17.0	9.1	26.3
Economically disadvantaged	10.6	11.3	11.8	25.5	14.9	30.2
ELs	3.2	2.2	11.1	13.5	10.3	29.0
Students with disabilities	8.0	10.1	10.0	18.3	10.3	26.8

[a] The percentage of students absent 10 percent or more of their total number of student days of membership in a school.

Table B4. Milton Public Schools: Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years, 2019-2021

	Fiscal year 2019		Fiscal year 2020		Fiscal year2021	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From local appropriations for schools						
By school committee	$49,625,050	$49,625,052	$51,028,200	$51,037,140	$52,738,319	$52,918,319
By municipality	$15,327,436	$15,112,309	$16,836,129	$17,107,028	$16,782,304	$16,580,887
Total from local appropriations	$64,952,486	$64,737,361	$67,864,329	$68,144,168	$69,520,623	$69,499,206
From revolving funds and grants	--	$8,668,495	--	$6,547,042	--	$8,590,364
Total expenditures	--	$73,405,857	--	$74,691,210	--	$78,089,570
Chapter 70 aid to education program						
Chapter 70 state aid[a]	--	$8,350,074	--	$9,033,561	--	$9,567,275
Required local contribution	--	$33,540,779	--	$35,446,365	--	$37,346,878
Required net school spending[b]	--	$41,890,853	--	$44,479,926	--	$46,914,153
Actual net school spending	--	$59,019,882	--	$62,016,333	--	$63,193,978
Over/under required ($)	--	$17,129,029	--	$17,536,407	--	$16,279,825
Over/under required (%)	--	40.9%	--	39.4%	--	34.7%

Note. Data as of June 1, 2022, and sourced from fiscal year 2020 district end-of-year reports and Chapter 70 program information on DESE website.
[a] Chapter 70 state aid funds are deposited in the local general fund and spent as local appropriations. [b] Required net school spending is the total of Chapter 70 aid and required local contribution. Net school spending includes only expenditures from local appropriations, not revolving funds, and grants. It includes expenditures for most administration, instruction, operations, and out-of-district tuitions. It does not include transportation, school lunches, debt, or capital.

Table B5. Milton Public Schools: Expenditures Per In-District Pupil, Fiscal Years 2019-2021

Expenditure category	2019	2020	2021
Administration	$467.39	$498.50	$555.24
Instructional leadership (district and school)	$1,195.14	$1,223.03	$1,343.32
Teachers	$5,944.05	$6,044.60	$6,381.64
Other teaching services	$1,249.01	$1,142.99	$1,317.06
Professional development	$127.55	$147.21	$111.78
Instructional materials, equipment, and technology	$258.86	$206.81	$346.90
Guidance, counseling and testing services	$446.39	$451.45	$447.30
Pupil services	$1,165.39	$1,000.19	$1,297.02
Operations and maintenance	$1,210.00	$1,129.12	$1,249.23
Insurance, retirement, and other fixed costs	$2,442.62	$2,626.87	$2,611.79
Total expenditures per in-district pupil	$14,506.42	$14,470.78	$15,661.29

Note. Any discrepancy between expenditures and total is because of rounding. Data are from
https://www.doe.mass.edu/finance/statistics/per-pupil-exp.xlsx

Milton Public Schools

Classroom Visits: Summary of Findings

Districtwide Instructional Observation Report

March 2022

Contents

Introduction

The *Districtwide Instructional Observation Report* presents ratings for the classroom observations that were conducted by certified observers at American Institutes for Research (AIR) as part of the Massachusetts District Reviews.

Observers visited Milton Public Schools during the week of March 7, 2022. The observers conducted 65 observations in a sample of classrooms across six schools. Observations were conducted in grades K-12 and focused primarily on literacy, English language arts, and mathematics instruction.

The classroom observations were guided by the Classroom Assessment Scoring System (CLASS), developed by the Center for Advanced Study of Teaching and Learning (CASTL) at the University of Virginia. Three levels of CLASS Manuals were used: K–3, Upper Elementary, and Secondary. The K–3 tool was used to observe grades K–3, the Upper Elementary tool was used to observe grades 4–5, and the Secondary tool was used to observe grades 6–12.

The K–3 protocol includes 10 classroom dimensions related to three domains: Emotional Support, Classroom Organization, and Instructional Support (listed in Table 1).

Table 1. CLASS K–3 Domains and Dimensions

Emotional Support	Classroom Organization	Instructional Support
■ Positive Climate ■ Negative Climate ■ Teacher Sensitivity ■ Regard for Student Perspectives	■ Behavior Management ■ Productivity ■ Instructional Learning Formats	■ Concept Development ■ Quality of Feedback ■ Language Modeling

The Upper Elementary and Secondary protocols include 11 classroom dimensions related to three domains: Emotional Support, Classroom Organization, and Instructional Support (listed in Table 2), in addition to Student Engagement.

Table 2. CLASS Upper Elementary and Secondary Domains and Dimensions

Emotional Support	Classroom Organization	Instructional Support
■ Positive Climate ■ Teacher Sensitivity ■ Regard for Student Perspectives	■ Behavior Management ■ Productivity ■ Negative Climate	■ Instructional Learning Formats ■ Content Understanding ■ Analysis and Inquiry ■ Quality of Feedback ■ Instructional Dialogue
Student Engagement		

When conducting a visit to a classroom, the observer rates each dimension (including Student Engagement) on a scale of 1 to 7. A rating of 1 or 2 indicates that the dimension was never or rarely evident during the visit. For example, a rating of 1 or 2 on Teacher Sensitivity indicates that, at the time of the visit, the teacher was not aware of students who needed extra support or attention, was unresponsive to or dismissive of students, or was ineffective at addressing students' problems; as a

result, students rarely sought support from the teacher or communicated openly with the teacher. A rating of 3, 4, or 5 indicates that the dimension was evident but not exhibited consistently or in a way that included all students. A rating of 6 or 7 indicates that the dimension was reflected in all or most classroom activities and in a way that included all or most students.

Members of the observation team who visited the classrooms all received training on the CLASS protocol and then passed a rigorous certification exam for each CLASS protocol to ensure that they were able to accurately rate the dimensions. All observers must pass an exam annually to maintain their certification.

Research on CLASS protocol shows that students in classrooms that rated high using this observation tool have greater gains in social skills and academic success than students in classrooms with lower ratings (MET Project, 2010; CASTL, n.d.). Furthermore, small improvements on these domains can affect student outcomes: "The ability to demonstrate even small changes in effective interactions has practical implications—differences in just over 1 point on the CLASS 7-point scale translate into improved achievement and social skill development for students" (CASTL, n.d., p. 3).

In this report, each CLASS dimension is defined, and descriptions of the dimensions at the high (6 or 7), middle (3, 4, or 5), and low levels (1 or 2) are presented *(definitions and rating descriptions are derived from the CLASS K–3, Upper Elementary, and Secondary Manuals).* For each dimension we indicate the frequency of classroom observations across the ratings and provide a districtwide average of the observed classrooms. In cases where a dimension is included in more than one CLASS manual level, those results are combined on the dimension-specific pages. In the summary of ratings table following the dimension-specific pages the averages for every dimension are presented by grade band (K-5, 6-8, and 9-12). For each dimension, we indicate the grade levels for which this dimension is included.

Positive Climate

Emotional Support domain, Grades K–12

Positive Climate reflects the emotional connection between the teacher and students and among students and the warmth, respect, and enjoyment communicated by verbal and nonverbal interactions (*CLASS K–3 Manual*, p. 23, *CLASS Upper Elementary Manual,* p. 21, *CLASS Secondary Manual*, p. 21). Table 3 (as well as tables for the remaining dimensions) includes the number of classrooms for each rating on each dimension and the district average for that dimension.

Table 3. Positive Climate: Number of Classrooms for Each Rating and District Average

Positive Climate District Average*: 5.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	5.0
Grades K-5	0	1	2	3	4	10	3	23	5.3
Grades 6-8	0	0	5	3	6	7	1	22	4.8
Grades 9-12	0	0	3	5	6	5	1	20	4.8

*The district average is an average of the observation scores. In Table 3, the district average is computed as: ([2 x 1] + [3 x 10] + [4 x 11] + [5 x 16] + [6 x 22] + [7 x 5]) ÷ 65 observations = 5.0

Ratings in the Low Range. All indicators are absent or only minimally present. Teachers and students do not appear to share a warm, supportive relationship. Interpersonal connections are not evident or only minimally evident. Affect in the classroom is flat, and there are rarely instances of teachers and students smiling, sharing humor, or laughing together. There are no, or very few, positive communications among the teacher and students; the teacher does not communicate encouragement. There is no evidence that students and the teacher respect one another or that the teacher encourages students to respect one another.

Ratings in the Middle Range. There are some indications that the teacher and students share a warm and supportive relationship, but some students may be excluded from this relationship, either by the teacher or the students. Some relationships appear constrained—for example, the teacher expresses a perfunctory interest in students, or encouragement seems to be an automatic statement and is not sincere. Sometimes, teachers and students demonstrate respect for one another.

Ratings in the High Range. There are many indications that the relationship among students and the teacher is positive and warm. The teacher is typically in close proximity to students, and encouragement is sincere and personal. There are frequent displays of shared laughter, smiles, and enthusiasm. Teachers and students show respect for one another (e.g., listening, using calm voices, using polite language). Positive communication (both verbal and nonverbal) and mutual respect are evident throughout the session.

Teacher Sensitivity

Emotional Support domain, Grades K–12

Teacher Sensitivity encompasses the teacher's awareness of and responsiveness to students' academic and emotional needs. High levels of sensitivity facilitate students' abilities to actively explore and learn because the teacher consistently provides comfort, reassurance, and encouragement (*CLASS K–3 Manual,* p. 32, *CLASS Upper Elementary Manual,* p. 27, *CLASS Secondary Manual,* p. 27).

Table 4. Teacher Sensitivity: Number of Classrooms for Each Rating and District Average

Teacher Sensitivity District Average*: 5.3

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	5.3
Grades K-5	0	1	2	1	9	6	4	23	5.3
Grades 6-8	0	0	2	4	7	6	3	22	5.2
Grades 9-12	0	0	1	0	8	9	2	20	5.6

*The district average is an average of the observation scores. In Table 4, the district average is computed as: ([2 x 1] + [3 x 5] + [4 x 5] + [5 x 24] + [6 x 21] + [7 x 9]) ÷ 65 observations = 5.3

Ratings in the Low Range. In these sessions, the teacher has not been aware of students who need extra support and pays little attention to students' needs. As a result, students are frustrated, confused, and disengaged. The teacher is unresponsive to and dismissive of students and may ignore students, squash their enthusiasm, and not allow them to share their moods or feelings. The teacher is not effective in addressing students' needs and does not appropriately acknowledge situations that may be upsetting to students. Students rarely seek support from the teacher and minimize conversations with the teacher, not sharing ideas or responding to questions.

Ratings in the Middle Range. The teacher is sometimes aware of student needs or aware of only a limited type of student needs, such as academic needs, not social-emotional needs. Or the teacher may be aware of some students and not of other students. The teacher does not always realize a student is confused and needs extra help or when a student already knows the material being taught. The teacher may be responsive at times to students but at other times may ignore or dismiss students. The teacher may respond only to students who are upbeat and positive and not support students who are upset. Sometimes, the teacher is effective in addressing students' concerns or problems, but not always.

Ratings in the High Range. The teacher's awareness of students and their needs is consistent and accurate. The teacher may predict how difficult a new task is for a student and acknowledge this difficulty. The teacher is responsive to students' comments and behaviors, whether positive or negative. The teacher consistently addresses students' problems and concerns and is effective in doing so. Students are obviously comfortable with the teacher and share ideas, work comfortably together, and ask and respond to questions, even difficult questions.

Regard for Student Perspectives

Emotional Support domain, Grades K–12

Regard for Student Perspectives captures the degree to which the teacher's interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view and encourage student responsibility and autonomy (*CLASS K–3 Manual,* p. 38, *CLASS Upper Elementary Manual,* p. 35, *CLASS Secondary Manual*, p. 35).

Table 5. Regard for Student Perspectives: Number of Classrooms for Each Rating and District Average

Regard for Student Perspectives District Average*: 3.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	3.4
Grades K-5	0	5	4	4	9	1	0	23	3.9
Grades 6-8	0	7	8	4	2	1	0	22	3.2
Grades 9-12	1	9	3	3	3	1	0	20	3.1

*The district average is an average of the observation scores. In Table 5, the district average is computed as: ([1 x 1] + [2 x 21] + [3 x 15] + [4 x 11] + [5 x 14] + [6 x 3]) ÷ 65 observations = 3.4

Ratings in the Low Range. At the low range, the teacher exhibits an inflexible, rigid adherence to his or her plan, without considering student ideas or allowing students to make contributions. The teacher inhibits student enthusiasm by imposing guidelines or making remarks that inhibit student expression. The teacher may rigidly adhere to a lesson plan and not respond to student interests. The teacher does not allow students any autonomy on how they conduct an activity, may control materials tightly, and may offer few opportunities for students to help out with classroom responsibilities. There are few opportunities for students to talk and express themselves.

Ratings in the Middle Range. The teacher exhibits control at times and at other times follows the students' lead and gives them some choices and opportunities to follow their interests. There are some opportunities for students to exercise autonomy, but student choice is limited. The teacher may assign students responsibility in the classroom, but in a limited way. At times, the teacher dominates the discussion, but at other times the teacher allows students to share ideas, although only at a minimal level or for a short period of time.

Ratings in the High Range. The teacher is flexible in following student leads, interests, and ideas and looks for ways to meaningfully engage students. Although the teacher has a lesson plan, students' ideas are incorporated into the lesson plan. The teacher consistently supports student autonomy and provides meaningful leadership opportunities. Students have frequent opportunities to talk, share ideas, and work together. Students have appropriate freedom of movement during activities.

Negative Climate

Emotional Support domain, Grades K–3
Classroom Organization domain, Grades 4–12

Negative Climate reflects the overall level of expressed negativity in the classroom. The frequency, quality, and intensity of teacher and student negativity are key to this dimension (*CLASS K–3 Manual*, p. 28, *CLASS Upper Elementary Manual,* p. 55, *CLASS Secondary Manual,* p. 55). For the purposes of this report, we have inversed the observers scores, to be consistent with the range scores across all dimensions. Therefore, a high range score in this dimension indicates an absence of negative climate, and a low range score indicates the presence of negative climate.[1]

Table 6. Negative Climate: Number of Classrooms for Each Rating and District Average

Negative Climate District Average*: 6.9

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	6.9
Grades K-5	0	0	0	0	0	2	21	23	6.9
Grades 6-8	0	0	0	0	0	2	20	22	6.9
Grades 9-12	0	0	0	0	0	2	18	20	6.9

*The district average is an average of the observation scores. In Table 6, the district average is computed as: ([6 x 6] + [7 x 59]) ÷ 65 observations = 6.9

Ratings in the Low Range. Negativity is pervasive. The teacher may express constant irritation, annoyance, or anger; unduly criticize students; or consistently use a harsh tone and/or take a harsh stance as he or she interacts with students. Threats or yelling are frequently used to establish control. Language is disrespectful and sarcastic. Severe negativity, such as the following actions, would lead to a high rating on negative climate, even if the action is not extended: students bullying one another, a teacher hitting a student, or students physically fighting with one another.

Ratings in the Middle Range. There are some expressions of mild negativity by the teacher or students. The teacher may express irritability, use a harsh tone, and/or express annoyance—usually during difficult moments in the classroom. Threats or yelling may be used to establish control over the classroom, but not constantly; they are used more as a response to situations. At times, the teacher and students may be sarcastic or disrespectful toward one another.

Ratings in the High Range. There is no display of negativity: No strong expressions of anger or aggression are exhibited, either by the teacher or students; if there is such a display, it is contained and does not escalate. The teacher does not issue threats or yell to establish control. The teacher and students are respectful and do not express sarcasm.

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[1] When observers rate this dimension it is scored so that a low rating (indicating little or no evidence of a negative climate) is better than a high rating (indicating abundant evidence of a negative climate). To be consistent across all ratings, for the purposes of this report we have inversed this scoring.

Behavior Management

Classroom Organization domain, Grades K–12

Behavior Management refers to the teacher's ability to provide clear behavioral expectations and use effective methods to prevent and redirect misbehavior (*CLASS K–3 Manual*, p. 45, *CLASS Upper Elementary Manual,* p. 41, *CLASS Secondary Manual*, p. 41).

Table 7. Behavior Management: Number of Classrooms for Each Rating and District Average

Behavior Management District Average*: 6.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**65**	**6.2**
Grades K-5	0	0	1	2	3	8	9	23	6.0
Grades 6-8	0	0	2	2	0	1	17	22	6.3
Grades 9-12	0	0	0	0	3	4	13	20	6.5

*The district average is an average of the observation scores. In Table 7, the district average is computed as: ([3 x 3] + [4 x 4] + [5 x 6] + [6 x 13] + [7 x 39]) ÷ 65 observations = 6.2

Ratings in the Low Range. At the low range, the classroom is chaotic. There are no rules and expectations, or they are not enforced consistently. The teacher does not monitor the classroom effectively and only reacts to student disruption, which is frequent. There are frequent instances of misbehavior in the classroom, and the teacher's attempts to redirect misbehavior are ineffective. The teacher does not use cues, such as eye contact, slight touches, gestures, or physical proximity, to respond to and redirect negative behavior.

Ratings in the Middle Range. Although rules and expectations may be stated, they are not consistently enforced, or the rules may be unclear. Sometimes, the teacher proactively anticipates and prevents misbehavior, but at other times the teacher ignores behavior problems until it is too late. Misbehavior may escalate because redirection is not always effective. Episodes of misbehavior are periodic.

Ratings in the High Range. At the high range, the rules and guidelines for behavior are clear, and they are consistently reinforced by the teacher. The teacher monitors the classroom and prevents problems from developing, using subtle cues to redirect behavior and address situations before they escalate. The teacher focuses on positive behavior and consistently affirms students' desirable behaviors. The teacher effectively uses cues to redirect behavior. There are no, or very few, instances of student misbehavior or disruptions.

Productivity

Classroom Organization domain, Grades K–12

Productivity considers how well the teacher manages instructional time and routines and provides activities for students so that they have the opportunity to be involved in learning activities (*CLASS K–3 Manual,* p. 51, *CLASS Upper Elementary Manual,* p. 49, *CLASS Secondary Manual*, p. 49).

Table 8. Productivity: Number of Classrooms for Each Rating and District Average

Productivity District Average*: 6.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**65**	**6.2**
Grades K-5	0	0	0	2	2	6	13	23	6.3
Grades 6-8	0	0	0	0	8	7	7	22	6.0
Grades 9-12	0	0	0	1	4	2	13	20	6.4

*The district average is an average of the observation scores. In Table 8, the district average is computed as: ([4 x 3] + [5 x 14] + [6 x 15] + [7 x 33]) ÷ 65 observations = 6.2

Ratings in the Low Range. At the low level, the teacher provides few activities for students. Much time is spent on managerial tasks (such as distributing papers) and/or on behavior management. Frequently during the observation, students have little to do and spend time waiting. The routines of the classroom are not clear and, as a result, students waste time, are not engaged, and are confused. Transitions take a long time and/or are too frequent. The teacher does not have activities organized and ready and seems to be caught up in last-minute preparations.

Ratings in the Middle Range. At the middle range, the teacher does provide activities for students but loses learning time to disruptions or management tasks. There are certain times when the teacher provides clear activities to students, but there are other times when students wait and lose focus. Some students (or all students, at some point) do not know what is expected of them. Some of the transitions may take too long, or classrooms may be productive during certain periods but then not productive during transitions. Although the teacher is mostly prepared for the class, last-minute preparations may still infringe on learning time.

Ratings in the High Range. The classroom runs very smoothly. The teacher provides a steady flow of activities for students, so students do not have downtime and are not confused about what to do next. The routines of the classroom are efficient, and all students know how to move from one activity to another and where materials are. Students understand the teacher's instructions and directions. Transitions are quick, and there are not too many of them. The teacher is fully prepared for the lesson.

Instructional Learning Formats

Classroom Organization domain, Grades K–3
Instructional Support domain, Grades 4–12

Instructional Learning Formats refer to the ways in which the teacher maximizes students' interest, engagement, and abilities to learn from the lesson and activities (*CLASS K–3 Manual*, p. 57; *CLASS Upper Elementary Manual*, p. 63, *CLASS Secondary Manual,* p. 61).

Table 9. Instructional Learning Formats: Number of Classrooms for Each Rating and District Average

Instructional Learning Formats District Average*: 5.1

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	5.1
Grades K-5	0	2	0	2	7	9	3	23	5.3
Grades 6-8	0	0	1	8	6	7	0	22	4.9
Grades 9-12	0	1	1	4	7	4	3	20	5.1

*The district average is an average of the observation scores. In Table 9, the district average is computed as: ([2 x 3] + [3 x 2] + [4 x 14] + [5 x 20] + [6 x 20] + [7 x 6]) ÷ 65 observations = 5.1

Ratings in the Low Range. The teacher exerts little effort in facilitating engagement in the lesson. Learning activities may be limited and seem to be at the rote level, with little teacher involvement. The teacher relies on one learning modality (e.g., listening) and does not use other modalities (e.g., movement, visual displays) to convey information and enhance learning. Or the teacher may be ineffective in using other modalities, not choosing the right props for the students or the classroom conditions. Students are uninterested and uninvolved in the lesson. The teacher does not attempt to guide students toward learning objectives and does not help them focus on the lesson by providing appropriate tools and asking effective questions.

Ratings in the Middle Range. At the middle range, the teacher sometimes facilitates engagement in the lesson but at other times does not, or the teacher facilitates engagement for some students and not for other students. The teacher may not allow students enough time to explore or answer questions. Sometimes, the teacher uses a variety of modalities to help students reach a learning objective, but at other times the teacher does not. Student engagement is inconsistent, or some students are engaged and other students are not. At times, students are aware of the learning objective and at other times they are not. The teacher may sometimes use strategies to help students organize information but at other times does not.

Ratings in the High Range. The teacher has multiple strategies and tools to facilitate engagement and learning and encourage participation. The teacher may move around, talk and play with students, ask open-ended questions of students, and allow students to explore. A variety of tools and props are used, including movement and visual/auditory resources. Students are consistently interested and engaged in the activities and lessons. The teacher focuses students on the learning objectives, which students understand. The teacher uses advanced organizers to prepare students for an activity, as well as reorientation strategies that help students regain focus.

Concept Development

Instructional Support domain, Grades K–3

Concept Development refers to the teacher's use of instructional discussions and activities to promote students' higher order thinking skills and cognition and the teacher's focus on understanding rather than on rote instruction (*CLASS K–3 Manual*, p. 64).

Table 10. Concept Development: Number of Classrooms for Each Rating and District Average

Concept Development District Average*: 3.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**15**	**3.4**
Grades K-3**	2	5	1	2	3	1	1	15	3.4

*The district average is an average of the observation scores. In Table 10, the district average is computed as: ([1 x 2] + [2 x 5] + [3 x 1] + [4 x 2] + [5 x 3] + [6 x 1] + [7 x 1]) ÷ 15 observations = 3.4

**Concept Development does not appear in the CLASS Upper Elementary Manual, therefore scores for the Elementary School Level represent grades K-3 only.

Ratings in the Low Range. At the low range, the teacher does not attempt to develop students' understanding of ideas and concepts, focusing instead on basic facts and skills. Discussion and activities do not encourage students to analyze and reason. There are few, if any, opportunities for students to create or generate ideas and products. The teacher does not link concepts to one another and does not ask students to make connections with previous content or their actual lives. The activities and the discussion are removed from students' lives and from their prior knowledge.

Ratings in the Middle Range. To some extent, the teacher uses discussions and activities to encourage students to analyze and reason and focuses somewhat on understanding of ideas. The activities and discussions are not fully developed, however, and there is still instructional time that focuses on facts and basic skills. Students may be provided some opportunities for creating and generating ideas, but the opportunities are occasional and not planned out. Although some concepts may be linked and also related to students' previous learning, such efforts are brief. The teacher makes some effort to relate concepts to students' lives but does not elaborate enough to make the relationship meaningful to students.

Ratings in the High Range. At the high range, the teacher frequently guides students to analyze and reason during discussions and activities. Most of the questions are open ended and encourage students to think about connections and implications. Teachers use problem solving, experimentation, and prediction; comparison and classification; and evaluation and summarizing to promote analysis and reasoning. The teacher provides students with opportunities to be creative and generate ideas. The teacher consistently links concepts to one another and to previous learning and relates concepts to students' lives.

Content Understanding

Instructional Support domain, Grades 4 – 12

Content Understanding refers to the depth of lesson content and the approaches used to help students comprehend the framework, key ideas, and procedures in an academic discipline. At a high level, this dimension refers to interactions among the teacher and students that lead to an integrated understanding of facts, skills, concepts, and principles (*CLASS Upper Elementary Manual*, p. 70, *CLASS Secondary Manual,* p. 68).

Table 11. Content Understanding: Number of Classrooms for Each Rating and District Average

Content Understanding District Average*: 4.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	50	4.2
Grades 4-5**	0	1	0	4	1	0	2	8	4.6
Grades 6-8	0	3	8	3	5	3	0	22	3.9
Grades 9-12	0	1	4	5	5	4	1	20	4.5

*The district average is an average of the observation scores. In Table 11, the district average is computed as: ([2 x 5] + [3 x 12] + [4 x 12] + [5 x 11] + [6 x 7] + [7 x 3]) ÷ 50 observations = 4.2

**Content Understanding does not appear in the CLASS K-3 Manual, therefore scores for the Elementary School Level represent grades 4-5 only.

Ratings in the Low Range. At the low range, the focus of the class is primarily on presenting discrete pieces of topically related information, absent broad, organizing ideas. The discussion and materials fail to effectively communicate the essential attributes of the concepts and procedures to students. The teacher makes little effort to elicit or acknowledge students' background knowledge or misconceptions or to integrate previously learned material when presenting new information.

Ratings in the Middle Range. At the middle range, the focus of the class is sometimes on meaningful discussion and explanation of broad, organizing ideas. At other times, the focus is on discrete pieces of information. Class discussion and materials communicate some of the essential attributes of concepts and procedures, but examples are limited in scope or not consistently provided. The teacher makes some attempt to elicit and/or acknowledge students' background knowledge or misconceptions and/or to integrate information with previously learned materials; however, these moments are limited in depth or inconsistent.

Ratings in the High Range. At the high range, the focus of the class is on encouraging deep understanding of content through the provision of meaningful, interactive discussion and explanation of broad, organizing ideas. Class discussion and materials consistently communicate the essential attributes of concepts and procedures to students. New concepts and procedures and broad ideas are consistently linked to students' prior knowledge in ways that advance their understanding and clarify misconceptions.

Analysis and Inquiry

Instructional Support domain, Grades 4 – 12

Analysis and Inquiry assesses the degree to which students are engaged in higher level thinking skills through their application of knowledge and skills to novel and/or open-ended problems, tasks, and questions. Opportunities for engaging in metacognition (thinking about thinking) also are included (*CLASS Upper Elementary Manual*, p. 81, *CLASS Secondary Manual*, p. 76).

Table 12. Analysis and Inquiry: Number of Classrooms for Each Rating and District Average

Analysis and Inquiry District Average*: 3.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**50**	**3.0**
Grades 4-5**	0	4	2	0	0	1	1	8	3.4
Grades 6-8	5	7	3	0	4	3	0	22	3.0
Grades 9-12	1	6	9	1	3	0	0	20	3.0

*The district average is an average of the observation scores. In Table 12, the district average is computed as: ([1 x 6] + [2 x 17] + [3 x 14] + [4 x 1] + [5 x 7] + [6 x 4] + [7 x 1]) ÷ 50 observations = 3.0

**Analysis and Inquiry does not appear in the CLASS K-3 Manual, therefore scores for the Elementary School Level represent grades 4-5 only.

Ratings in the Low Range. At the low range, students do not engage in higher order thinking skills. Instruction is presented in a rote manner, and there are no opportunities for students to engage in novel or open-ended tasks. Students are not challenged to apply previous knowledge and skills to a new problem, nor are they encouraged to think about, evaluate, or reflect on their own learning. Students do not have opportunities to plan their own learning experiences.

Ratings in the Middle Range. Students occasionally engage in higher order thinking through analysis and inquiry, but the episodes are brief or limited in depth. The teacher provides opportunities for students to apply knowledge and skills within familiar contexts and offers guidance to students but does not provide opportunities for analysis and problem solving within novel contexts and/or without teacher support. Students have occasional opportunities to think about their own thinking through explanations, self-evaluations, reflection, and planning; these opportunities, however, are brief and limited in depth.

Ratings in the High Range. At the high range, students consistently engage in extended opportunities to use higher order thinking through analysis and inquiry. The teacher provides opportunities for students to independently solve or reason through novel and open-ended tasks that require students to select, utilize, and apply existing knowledge and skills. Students have multiple opportunities to think about their own thinking through explanations, self-evaluations, reflection, and planning.

Quality of Feedback

Instructional Support domain, Grades K–12

Quality of Feedback refers to the degree to which the teacher provides feedback that expands learning and understanding and encourages continued participation in the learning activity (*CLASS K–3 Manual*, p. 72). In the upper elementary and secondary classrooms, significant feedback also may be provided by peers (*CLASS Upper Elementary Manual*, p. 89, *CLASS Secondary Manual*, p. 93). Regardless of the source, the focus of the feedback motivates learning.

Table 13. Quality of Feedback: Number of Classrooms for Each Rating and District Average

Quality of Feedback District Average*: 4.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	65	4.0
Grades K-5	1	5	2	5	4	2	4	23	4.2
Grades 6-8	0	4	7	4	6	1	0	22	3.7
Grades 9-12	0	5	4	4	3	2	2	20	4.0

*The district average is an average of the observation scores. In Table 13, the district average is computed as: ([1 x 1] + [2 x 14] + [3 x 13] + [4 x 13] + [5 x 13] + [6 x 5] + [7 x 6]) ÷ 65 observations = 4.0

Ratings in the Low Range. At the low range, the teacher dismisses incorrect responses or misperceptions and rarely scaffolds student learning. The teacher is more interested in students providing the correct answer than understanding. Feedback is perfunctory. The teacher may not provide opportunities to learn whether students understand or are interested. The teacher rarely questions students or asks them to explain their thinking and reasons for their responses. The teacher does not or rarely provides information that might expand student understanding and rarely offers encouragement that increases student effort and persistence.

Ratings in the Middle Range. In the middle range, the teacher sometimes scaffolds students, but this is not consistent. On occasion, the teacher facilitates feedback loops so that students may elaborate and expand on their thinking, but these moments are not sustained long enough to accomplish a learning objective. Sometimes, the teacher asks students about or prompts them to explain their thinking and provides information to help students understand, but sometimes the feedback is perfunctory. At times, the teacher encourages student efforts and persistence.

Ratings in the High Range. In this range, the teacher frequently scaffolds students who are having difficulty, providing hints or assistance as needed. The teacher engages students in feedback loops to help them understand ideas or reach the right response. The teacher often questions students, encourages them to explain their thinking, and provides additional information that may help students understand. The teacher regularly encourages students' efforts and persistence.

Language Modeling

Instructional Support domain, Grades K – 3

Language Modeling refers to the quality and amount of the teacher's use of language stimulation and language facilitation techniques (*CLASS K – 3 Manual*, p. 79).

Table 14. Language Modeling: Number of Classrooms for Each Rating and District Average

Language Modeling District Average*: 3.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**15**	**3.4**
Grades K-3**	1	4	3	3	3	1	0	15	3.4

*The district average is an average of the observation scores. In Table 14, the district average is computed as: ([1 x 1] + [2 x 4] + [3 x 3] + [4 x 3] + [5 x 3] + [6 x 1]) ÷ 15 observations = 3.4

**Language Modeling does not appear in the CLASS Upper Elementary Manual, therefore scores for the Elementary School Level represent grades K-3 only.

Ratings in the Low Range. In the low range, there are few conversations in the classroom, particularly between the students and the teacher. The teacher responds to students' initiating talk with only a few words, limits students' use of language (in responding to questions) and asks questions that mainly elicit closed-ended responses. The teacher does not or rarely extends students' responses or repeats them for clarification. The teacher does not engage in self-talk or parallel talk—explaining what he or she or the students are doing. The teacher does not use new words or advanced language with students. The language used has little variety.

Ratings in the Middle Range. In this range, the teacher talks with students and shows some interest in students, but the conversations are limited and not prolonged. Usually, the teacher directs the conversations, although the conversations may focus on topics of interest to students. More often, there is a basic exchange of information but limited conversation. The teacher asks a mix of closed- and open-ended questions, although the closed-ended questions may require only short responses. Sometimes, the teacher extends students' responses or repeats what students say. Sometimes, the teacher maps his or her own actions and the students' actions through language and description. The teacher sometimes uses advanced language with students.

Ratings in the High Range. There are frequent conversations in the classroom, particularly between students and the teacher, and these conversations promote language use. Students are encouraged to converse and feel they are valued conversational partners. The teacher asks many open-ended questions that require students to communicate more complex ideas. The teacher often extends or repeats student responses. Frequently, the teacher maps his or her actions and student actions descriptively and uses advanced language with students.

Instructional Dialogue

Instructional Support domain, Grades 4 – 12

Instructional Dialogue captures the purposeful use of content-focused discussion among teachers and students that is cumulative, with the teacher supporting students to chain ideas together in ways that lead to deeper understanding of content. Students take an active role in these dialogues, and both the teacher and students use strategies that facilitate extended dialogue (*CLASS Upper Elementary Manual*, p. 97, *CLASS Secondary Manual*, p. 101).

Table 15. Instructional Dialogue: Number of Classrooms for Each Rating and District Average

Instructional Dialogue District Average*: 3.5

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	50	3.5
Grades 4-5**	0	1	2	2	1	1	1	8	4.3
Grades 6-8	0	7	4	6	3	2	0	22	3.5
Grades 9-12	5	4	2	4	1	3	1	20	3.3

*The district average is an average of the observation scores. In Table 15, the district average is computed as: ([1 x 5] + [2 x 12] + [3 x 8] + [4 x 12] + [5 x 5] + [6 x 6] + [7 x 2]) ÷ 50 observations = 3.5

**Instructional Dialogue does not appear in the CLASS K-3 Manual, therefore scores for the Elementary School Level represent grades 4-5 only.

Ratings in the Low Range. At the low range, there are no or few discussions in the class, the discussions are not related to content or skill development, or the discussions contain only simple question-response exchanges between the teacher and students. The class is dominated by teacher talk, and discussion is limited. The teacher and students ask closed-ended questions; rarely acknowledge, report, or extend other students' comments; and/or appear disinterested in other students' comments, resulting in many students not being engaged in instructional dialogues.

Ratings in the Middle Range. At this range, there are occasional content-based discussions in class among teachers and students; however, these exchanges are brief or quickly move from one topic to another without follow-up questions or comments from the teacher and other students. The class is mostly dominated by teacher talk, although there are times when students take a more active role, or there are distributed dialogues that involve only a few students in the class. The teacher and students sometimes facilitate and encourage more elaborate dialogue, but such efforts are brief, inconsistent, or ineffective at consistently engaging students in extended dialogues.

Ratings in the High Range. At the high range, there are frequent, content-driven discussions in the class between teachers and students or among students. The discussions build depth of knowledge through cumulative, contingent exchanges. The class dialogues are distributed in a way that the teacher and the majority of students take an active role or students are actively engaged in instructional dialogues with each other. The teacher and students frequently use strategies that encourage more elaborate dialogue, such as open-ended questions, repetition or extension, and active listening. Students respond to these techniques by fully participating in extended dialogues.

Student Engagement

Student Engagement domain, Grades 4 –12

Student Engagement refers to the extent to which all students in the class are focused and participating in the learning activity that is presented or facilitated by the teacher. The difference between passive engagement and active engagement is reflected in this rating (*CLASS Upper Elementary Manual*, p. 105).

Table 16. Student Engagement: Number of Classrooms for Each Rating and District Average

Student Engagement District Average*: 5.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	50	5.4
Grades 4-5**	0	0	0	0	2	4	2	8	6.0
Grades 6-8	0	0	0	9	5	6	2	22	5.0
Grades 9-12	0	0	0	4	8	3	5	20	5.5

*The district average is an average of the observation scores. In Table 16, the district average is computed as: ([4 x 13] + [5 x 15] + [6 x 13] + [7 x 9]) ÷ 50 observations = 5.4

**Student Engagement does not appear in the CLASS K-3 Manual, therefore scores for the Elementary School Level represent grades 4-5 only.

Ratings in the Low Range. In the low range, the majority of students appear distracted or disengaged.

Ratings in the Middle Range. In the middle range, students are passively engaged, listening to or watching the teacher; student engagement is mixed, with the majority of students actively engaged for part of the time and disengaged for the rest of the time; or there is a mix of student engagement, with some students actively engaged and some students disengaged.

Ratings in the High Range. In the high range, most students are actively engaged in the classroom discussions and activities.

Summary of Average Ratings: Grades K–5

Table 17. Summary Table of Average Ratings for Each Dimension in Grades K–5

	Low Range		Middle Range			High Range		n	Average Scores*
	1	2	3	4	5	6	7		
Emotional Support Domain	**0**	**7**	**8**	**8**	**22**	**19**	**28**	**92**	**5.3**
Positive Climate	0	1	2	3	4	10	3	23	5.3
Negative Climate**	0	0	0	0	0	2	21	23	6.9
Teacher Sensitivity	0	1	2	1	9	6	4	23	5.3
Regard for Student Perspectives	0	5	4	4	9	1	0	23	3.9
Classroom Organization Domain	**0**	**2**	**1**	**6**	**12**	**23**	**25**	**69**	**5.9**
Behavior Management	0	0	1	2	3	8	9	23	6.0
Productivity	0	0	0	2	2	6	13	23	6.3
Instructional Learning Formats***	0	2	0	2	7	9	3	23	5.3
Instructional Support Domain	**4**	**20**	**10**	**16**	**12**	**6**	**9**	**77**	**3.9**
Concept Development (K-3 only)	2	5	1	2	3	1	1	15	3.4
Content Understanding (UE only)	0	1	0	4	1	0	2	8	4.6
Analysis and Inquiry (UE only)	0	4	2	0	0	1	1	8	3.4
Quality of Feedback	1	5	2	5	4	2	4	23	4.2
Language Modeling (K-3 only)	1	4	3	3	3	1	0	15	3.4
Instructional Dialogue (UE only)	0	1	2	2	1	1	1	8	4.3
Student Engagement (UE only)	**0**	**0**	**0**	**0**	**2**	**4**	**2**	**8**	**6.0**

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([2 x 1] + [3 x 2] + [4 x 3] + [5 x 4] + [6 x 10] + [7 x 3]) ÷ 23 observations = 5.3

**Negative Climate is rated on an inverse scale. An original score of 1 is given a value of 7. The scoring in the table reflects the normalized adjustment: ([6 x 2] + [7 x 21]) ÷ 23 observations = 6.9. In addition, Negative Climate appears in the Classroom Organization Domain for the Upper Elementary Manual.

***Instructional Learning Formats appears in the Instructional Support Domain for the Upper Elementary Manual.

Summary of Average Ratings: Grades 6–8

Table 18. Summary Table of Average Ratings for Each Dimension in Grades 6–8

	Low Range		Middle Range			High Range		n	Average Scores*
	1	2	3	4	5	6	7		
Emotional Support Domain	0	7	15	11	15	14	4	66	4.4
Positive Climate	0	0	5	3	6	7	1	22	4.8
Teacher Sensitivity	0	0	2	4	7	6	3	22	5.2
Regard for Student Perspectives	0	7	8	4	2	1	0	22	3.2
Classroom Organization Domain	0	0	2	2	8	10	44	66	6.4
Behavior Management	0	0	2	2	0	1	17	22	6.3
Productivity	0	0	0	0	8	7	7	22	6.0
Negative Climate**	0	0	0	0	0	2	20	22	6.9
Instructional Support Domain	5	21	23	21	24	16	0	110	3.8
Instructional Learning Formats	0	0	1	8	6	7	0	22	4.9
Content Understanding	0	3	8	3	5	3	0	22	3.9
Analysis and Inquiry	5	7	3	0	4	3	0	22	3.0
Quality of Feedback	0	4	7	4	6	1	0	22	3.7
Instructional Dialogue	0	7	4	6	3	2	0	22	3.5
Student Engagement	0	0	0	9	5	6	2	22	5.0

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([3 x 5] + [4 x 3] + [5 x 6] + [6 x 7] + [7 x 1]) ÷ 22 observations = 4.8

**Negative Climate is rated on an inverse scale. An original score of 1 is given a value of 7. The scoring in the table reflects the normalized adjustment: ([6 x 2] + [7 x 20]) ÷ 22 observations = 6.9

Summary of Average Ratings: Grades 9–12

Table 19. Summary Table of Average Ratings for Each Dimension in Grades 9–12

	Low Range		Middle Range			High Range		n	Average Scores*
	1	**2**	**3**	**4**	**5**	**6**	**7**		
Emotional Support Domain	**1**	**9**	**7**	**8**	**17**	**15**	**3**	**60**	**4.5**
Positive Climate	0	0	3	5	6	5	1	20	4.8
Teacher Sensitivity	0	0	1	0	8	9	2	20	5.6
Regard for Student Perspectives	1	9	3	3	3	1	0	20	3.1
Classroom Organization Domain	**0**	**0**	**0**	**1**	**7**	**8**	**44**	**60**	**6.6**
Behavior Management	0	0	0	0	3	4	13	20	6.5
Productivity	0	0	0	1	4	2	13	20	6.4
Negative Climate**	0	0	0	0	0	2	18	20	6.9
Instructional Support Domain	**6**	**17**	**20**	**18**	**19**	**13**	**7**	**100**	**3.9**
Instructional Learning Formats	0	1	1	4	7	4	3	20	5.1
Content Understanding	0	1	4	5	5	4	1	20	4.5
Analysis and Inquiry	1	6	9	1	3	0	0	20	3.0
Quality of Feedback	0	5	4	4	3	2	2	20	4.0
Instructional Dialogue	5	4	2	4	1	3	1	20	3.3
Student Engagement	**0**	**0**	**0**	**4**	**8**	**3**	**5**	**20**	**5.5**

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([3 x 3] + [4 x 5] + [5 x 6] + [6 x 5] + [7 x 1]) ÷ 20 observations = 4.8

**Negative Climate is rated on an inverse scale. An original score of 1 is given a value of 7. The scoring in the table reflects the normalized adjustment: ([6 x 2] + [7 x 18]) ÷ 20 observations = 6.9

References

Center for Advanced Study of Teaching and Learning. (n.d.). *Measuring and improving teacher-student interactions in PK−12 settings to enhance students' learning*. Charlottesville, VA: University of Virginia. Retrieved from http://www.teachstone.com/wp-content/uploads/2011/05/class-mtp-pk-12-brief.pdf

MET Project. (2010). *The CLASS protocol for classroom observations*. Seattle, WA: Bill & Melinda Gates Foundation. Retrieved from http://metproject.org/resources/CLASS_10_29_10.pdf

Pianta, R. C., Hamre, B. K., & Mintz, S. (2012). *Classroom Assessment Scoring System (CLASS) Manual, Secondary.* Charlottesville, VA: Teachstone.

Pianta, R. C., Hamre, B. K., & Mintz, S. (2012). *Classroom Assessment Scoring System (CLASS) Manual, Upper Elementary.* Charlottesville, VA: Teachstone.

Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom Assessment Scoring System (CLASS) Manual, K−3.* Baltimore, MD: Paul H. Brookes Publishing Co.

Appendix D. Resources to Support Implementation of DESE's District Standards and Indicators

Table D1. Resources to Support Leadership and Governance

Resource	Description
Transforming School Funding: A Guide to Implementing Student-Based Budgeting (SBB) from Education Resource Strategies	This guide describes a process to help districts tie funding to specific student needs.

Table D2. Resources to Support Human Resources and Professional Development

Resource	Description
Quick Reference Guide: Opportunities to Streamline the Evaluation Process	This guide helps districts reflect on and continuously improve their evaluation systems: ■ What's working? What are the bright spots? ■ How can we streamline the process to stay focused on professional growth and development? ■ What do we need to adjust to ensure our system is valuable to educators and students?
Identifying Meaningful Professional Development	A video in which educators from three Massachusetts districts discuss the importance of targeted, meaningful professional development and the ways districts can use the evaluation process to identify the most effective professional development supports for all educators.
The Educator Effectiveness Guidebook for Inclusive Practice	This guide includes tools for districts, schools, and educators aligned to the Massachusetts Educator Evaluation Framework. It promotes evidence-based best practices for inclusion following the principles of Universal Design for Learning, positive behavioral interventions and supports, and social-emotional learning.
Making Inclusive Education Work by Richard A. Villa and Jacqueline S. Thousand	The Association for Supervision and Curriculum Development is a nonprofit, nonpartisan membership organization that develops programs, products, and services essential to the way educators learn, teach, and lead.

Table D3. Resources to Support Financial and Asset Management

Resource	Description
Spending Money Wisely: Getting the Most From School District Budgets (scroll down to Research section)	A discussion of the top 10 opportunities for districts to realign resources and free up funds to support strategic priorities.

Appendix E. Student Performance Tables

The COVID-19 pandemic had a profound impact on the 2020-2021 school year. Data reported in this appendix may have been affected by the pandemic. Please keep this in mind when reviewing the data and take particular care when comparing data across multiple school years.

Table E1. Milton Public Schools: Next-Generation MCAS ELA Scaled Scores in Grades 3-8, 2018-2021

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
All	2,061	507.7	511.1	506.9	-0.8	496.5	10.4
African American/ Black	260	494.2	496.8	493.3	-0.9	486.4	6.9
Asian	158	512.3	518.0	510.2	-2.1	508.5	1.7
Hispanic/Latino	103	504.1	506.4	496.8	-7.3	484.3	12.5
Multirace	105	515.1	516.0	512.6	-2.5	499.7	12.9
White	1,432	509.8	513.3	509.3	-0.5	501.3	8.0
High need	606	492.3	494.8	492.1	-0.2	485.9	6.2
Economically disadvantaged	258	492.9	496.1	491.9	-1.0	485.2	6.7
ELs and former ELs	116	500.4	504.8	497.0	-3.4	482.8	14.2
Students with disabilities	377	486.5	487.4	486.0	-0.5	478.1	7.9

Note. Next-Generation MCAS Achievement Levels: 440-469 Not Meeting Expectations; 470-499 Partially Meeting Expectations; 500-529 Meeting Expectations; 530-560 Exceeding Expectations.

Table E2. Milton Public Schools: Next-Generation MCAS Mathematics Scaled Scores in Grades 3-8, 2018-2021

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
All	2,062	507.8	509.0	499.9	-7.9	489.7	10.2
African American/ Black	260	492.8	494.5	483.8	-9.0	477.3	6.5
Asian	158	515.8	518.5	509.6	-6.2	508.6	1.0
Hispanic/Latino	103	502.2	501.7	489.3	-12.9	476.5	12.8
Multirace	105	513.7	515.5	504.2	-9.5	492.1	12.1
White	1,433	510.1	511.2	502.2	-7.9	494.3	7.9
High need	606	493.7	494.6	485.7	-8.0	479.0	6.7
Economically disadvantaged	258	493.8	495.6	482.5	-11.3	477.4	5.1
ELs and former ELs	116	503.5	504.3	495.9	-7.6	477.8	18.1
Students with disabilities	377	488.0	488.6	480.3	-7.7	472.5	7.8

Note. Next-Generation MCAS Achievement Levels: 440-469 Not Meeting Expectations; 470-499 Partially Meeting Expectations; 500-529 Meeting Expectations; 530-560 Exceeding Expectations.

Table E3. Milton Public Schools: Next-Generation MCAS ELA Percentage Meeting or Exceeding Expectations in Grades 3-8, 2018-2021

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
All	2,061	65%	71%	65%	0	46%	19
African American/ Black	260	37%	44%	38%	1	28%	10
Asian	158	75%	85%	72%	-3	66%	6
Hispanic/Latino	103	60%	65%	47%	-13	26%	21
Multirace	105	78%	79%	73%	-5	51%	22
White	1,432	69%	75%	69%	0	54%	15
High need	606	34%	39%	38%	4	28%	10
Economically disadvantaged	258	33%	44%	40%	7	27%	13
ELs and former ELs	116	52%	61%	47%	-5	24%	23
Students with disabilities	377	23%	23%	26%	3	16%	10

Table E4. Milton Public Schools: Next-Generation MCAS Mathematics Percentage Meeting or Exceeding Expectations in Grades 3-8, 2018-2021

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
All	2,062	67%	69%	51%	-16	33%	18
African American/ Black	260	37%	39%	23%	-14	14%	9
Asian	158	86%	86%	66%	-20	64%	2
Hispanic/Latino	103	57%	52%	29%	-28	14%	15
Multirace	105	68%	74%	58%	-10	37%	21
White	1,433	72%	75%	55%	-17	40%	15
High need	606	36%	36%	24%	-12	16%	8
Economically disadvantaged	258	39%	39%	18%	-21	14%	4
ELs and former ELs	116	58%	58%	42%	-16	17%	25
Students with disabilities	377	25%	23%	16%	-9	10%	6

Table E5. Milton Public Schools: Next-Generation MCAS ELA and Mathematics Scaled Scores in Grade 10, 2021

Group	ELA				Mathematics			
	N (2021)	2021	State	Above/below	N (2021)	2021	State	Above/below
All	265	516.8	507.3	9.5	265	510.6	500.6	10.0
African American/Black	45	495.4	494.6	0.8	45	490.1	486.7	3.4
Asian	18	532.7	518.2	14.5	18	524.3	520.9	3.4
Hispanic/Latino	12	505.7	491.9	13.8	12	499.9	485.3	14.6
Multirace	4	—	510.6	—	4	—	503.9	—
White	186	521.4	512.5	8.9	186	514.8	504.9	9.9
High need	68	495.8	493.3	2.5	68	493.2	486.5	6.7
Economically disadvantaged	34	496.7	493.7	3.0	34	491.5	486.6	4.9
ELs and former ELs	6	—	477.9	—	6	—	477.6	—
Students with disabilities	46	490.4	487.2	3.2	46	490.2	479.6	10.6

Note. Next-Generation MCAS Achievement Levels: 440-469 Not Meeting Expectations; 470-499 Partially Meeting Expectations; 500-529 Meeting Expectations; 530-560 Exceeding Expectations.

Table E6. Milton Public Schools: Next-Generation MCAS ELA and Mathematics Percentage Meeting or Exceeding Expectations in Grade 10, 2021

Group	ELA				Mathematics			
	N (2021)	2021	State	Above/Below	N (2021)	2021	State	Above/Below
All	265	78%	64%	14	265	72%	52%	20
African American/Black	45	44%	41%	3	45	31%	27%	4
Asian	18	94%	80%	14	18	83%	80%	3
Hispanic/Latino	12	58%	39%	19	12	50%	26%	24
Multirace	4	—	67%	—	4	—	55%	—
White	186	86%	73%	13	186	82%	60%	22
High need	68	43%	39%	4	68	31%	26%	5
Economically disadvantaged	34	53%	41%	12	34	38%	27%	11
ELs and former ELs	6	—	19%	—	6	—	15%	—
Students with disabilities	46	26%	25%	1	46	17%	14%	3

Table E7. Milton Public Schools: Next-Generation MCAS Science Percentage Meeting or Exceeding Expectations in Grades 5 and 8, 2019-2021

Group	N (2021)	2019	2021	State (2021)	Above/below
All	614	65%	62%	42%	20
African American/Black	76	36%	29%	19%	10
Asian	37	79%	78%	62%	16
Hispanic/Latino	22	50%	41%	20%	21
Multirace, non-Hispanic/Latino	28	70%	64%	47%	17
White	450	72%	67%	50%	17
High need	187	29%	39%	23%	16
Economically disadvantaged	86	27%	37%	21%	16
ELs and former ELs	29	50%	55%	18%	37
Students with disabilities	121	20%	27%	15%	12

Note. Grade 10 results for the spring 2021 STE are not provided because students in the class of 2023 were not required to take the STE test. Information about Competency Determination requirements is available at https://www.doe.mass.edu/mcas/graduation.html.

Table E8. Milton Public Schools: Next-Generation MCAS ELA Percentage Meeting or Exceeding Expectations in Grades 3-10, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	381	75%	75%	65%	-10	51%	14
4	392	67%	79%	72%	5	49%	23
5	343	70%	68%	69%	-1	47%	22
6	335	65%	75%	70%	5	47%	23
7	307	47%	65%	53%	6	43%	10
8	303	60%	61%	57%	-3	41%	16
3-8	2,061	65%	71%	65%	0	46%	19
10	265	—	76%	78%	—	64%	14

Table E9. Milton Public Schools: Next-Generation MCAS Mathematics Percentage Meeting or Exceeding Expectations in Grades 3-10, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	381	69%	60%	51%	-18	33%	18
4	391	74%	80%	65%	-9	33%	32
5	344	70%	74%	60%	-10	33%	27
6	335	60%	67%	38%	-22	33%	5

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
7	308	67%	65%	44%	-23	35%	9
8	303	61%	66%	40%	-21	32%	8
3-8	2,062	67%	69%	51%	-16	33%	18
10	265	—	74%	72%	—	52%	20

Table E10. Milton Public Schools: Next-Generation MCAS Science Percentage Meeting or Exceeding Expectations in Grades 5 and 8, 2019-2021

Grade	N (2021)	2019	2020	2021	3-year change	State (2021)
5	344	68%	—	66%	-2	42%
8	270	62%	—	57%	-5	41%
5 and 8	614	65%	—	62%	-3	42%
10	—	—	—	—	—	—

Note. Grade 10 results for spring 2021 STE are not provided because students in the class of 2023 were not required to take the STE test. Information about Competency Determination requirements is available at https://www.doe.mass.edu/mcas/graduation.html. In 2019, 10th graders took the Legacy MCAS science test.

Table E11. Milton Public Schools: ELA and Mathematics Mean Student Growth Percentile in Grades 3-10, 2019-2021

Grade	ELA				Mathematics			
	N (2021)	2019	2021	State (2021)	N (2021)	2019	2021	State (2021)
3	—	—	—	—	—	—	—	—
4	—	55.2	—	—	—	62.9	—	—
5	326	52.1	44.5	34.9	327	51.4	48.4	31.9
6	317	60.2	37.0	37.3	317	36.1	14.6	26.3
7	283	55.0	35.0	36.1	284	52.7	24.0	35.8
8	288	55.5	32.0	34.8	288	52.8	23.2	27.4
3-8	1,214	55.6	37.4	35.8	1,216	51.3	27.9	30.4
10	245	60.3	63.1	52.5	244	57.8	37.2	36.5

Table E12. Milton Public Schools: Next-Generation MCAS ELA Percentage Meeting or Exceeding Expectations by Grade and School, 2021

School	3	4	5	6	7	8	3-8	10
Collicot	69%	73%	73%	—	—	—	72%	—
Cunningham	69%	74%	69%	—	—	—	71%	—
Glover	64%	81%	72%	—	—	—	72%	—
Tucker	58%	58%	58%	—	—	—	58%	—

School	3	4	5	6	7	8	3-8	10
Pierce Middle	—	—	—	70%	54%	58%	61%	—
Milton High	—	—	—	—	—	—	—	79%
District	65%	72%	69%	70%	53%	57%	65%	78%
State	51%	49%	47%	47%	43%	41%	46%	64%

Table E13. Milton Public Schools: Next-Generation MCAS Mathematics Percentage Meeting or Exceeding Expectations by Grade and School, 2021

School	3	4	5	6	7	8	3-8	10
Collicot	54%	67%	65%	—	—	—	62%	—
Cunningham	50%	71%	61%	—	—	—	61%	—
Glover	60%	79%	63%	—	—	—	67%	—
Tucker	37%	42%	51%	—	—	—	43%	—
Pierce Middle	—	—	—	38%	46%	41%	41%	—
Milton High	—	—	—	—	—	—	—	72%
District	51%	65%	60%	38%	44%	40%	51%	72%
State	33%	33%	33%	33%	35%	32%	33%	52%

Table E14. Milton Public Schools: Next-Generation MCAS Science Percentage Meeting or Exceeding Expectations by Grade and School, 2021

School	5	8	5 and 8	10
Collicot	69%	—	69%	—
Cunningham	62%	—	62%	—
Glover	74%	—	74%	—
Tucker	58%	—	58%	—
Pierce Middle	—	59%	59%	—
Milton High	—	—	—	—
District	66%	57%	62%	—
State	42%	41%	42%	—

Note. Grade 10 results for spring 2021 STE are not provided because students in the class of 2023 were not required to take the STE test. Information about Competency Determination requirements is available at https://www.doe.mass.edu/mcas/graduation.html.

Table E15. Milton Public Schools: Next-Generation MCAS ELA Percentage Meeting and Exceeding Expectations in Grades 3-8 by School, 2021

School	All	High need	Econ. dis.	SWD	ELs and former ELs	African American	Asian	Hispanic	Multirace	White
Collicot	72%	38%	38%	31%	48%	40%	67%	75%	71%	74%
Cunningham	71%	43%	47%	22%	71%	42%	96%	27%	90%	72%
Glover	72%	44%	34%	36%	—	33%	87%	45%	74%	75%
Tucker	58%	42%	42%	31%	37%	41%	53%	46%	71%	76%
Pierce Middle	61%	35%	40%	22%	40%	39%	66%	46%	72%	65%
Milton High	—	—	—	—	—	—	—	—	—	—
District	65%	38%	40%	26%	47%	38%	72%	47%	73%	69%
State	46%	28%	27%	16%	24%	28%	66%	26%	51%	54%

Note. High need = students with high need; Econ. dis. = students who are economically disadvantaged; SWD = students with disabilities; multirace = students who are multiple races but not Hispanic or Latino.

Table E16. Milton Public Schools: Next-Generation MCAS Mathematics Percentage Meeting and Exceeding Expectations in Grades 3-8 by School, 2021

School	All	High need	Econ. Dis.	SWD	ELs and former ELs	African American	Asian	Hispanic	Multirace	White
Collicot	62%	32%	19%	25%	48%	30%	64%	58%	50%	64%
Cunningham	61%	36%	30%	26%	59%	32%	84%	18%	70%	63%
Glover	67%	38%	28%	30%	—	28%	80%	36%	65%	71%
Tucker	43%	17%	12%	0%	37%	23%	35%	38%	43%	68%
Pierce Middle	41%	16%	15%	9%	33%	22%	63%	26%	64%	43%
Milton High	—	—	—	—	—	—	—	—	—	—
District	51%	24%	18%	16%	42%	23%	66%	29%	58%	55%
State	33%	16%	14%	10%	17%	14%	64%	14%	37%	40%

Note. High need = students with high need; Econ. dis. = students who are economically disadvantaged; SWD = students with disabilities; multirace = students who are multiple races but not Hispanic or Latino.

Table E17. Milton Public Schools: Next-Generation MCAS ELA Percentage Meeting or Exceeding Expectations in Grade 10, 2021

School	All	High need	Econ. Dis.	SWD	ELs and former ELs	African American	Asian	Hispanic	Multirace	White
Milton High	79%	44%	53%	27%	—	44%	94%	58%	—	87%
District	78%	43%	53%	26%	—	44%	94%	58%	—	86%
State	64%	39%	41%	25%	19%	41%	80%	39%	67%	73%

Note. High need = students with high need; Econ. dis. = students who are economically disadvantaged; SWD = students with disabilities; multirace = students who are multiple races but not Hispanic or Latino.

Table E18. Milton Public Schools: Next-Generation MCAS Mathematics Percentage Meeting or Exceeding Expectations in Grade 10, 2021

School	All	High need	Econ. Dis.	SWD	ELs and former ELs	African American	Asian	Hispanic	Multirace	White
Milton High	72%	30%	38%	16%	—	31%	83%	50%	—	83%
District	72%	31%	38%	17%	—	31%	83%	50%	—	82%
State	52%	26%	27%	14%	15%	27%	80%	26%	55%	60%

Note. High need = students with high need; Econ. dis. = students who are economically disadvantaged; SWD = students with disabilities; multirace = students who are multiple races but not Hispanic or Latino.

Table E19. Milton Public Schools: Next-Generation MCAS Science Percentage Meeting and Exceeding Expectations in Grades 5-8 by School, 2021

School	All	High need	Econ. Dis.	SWD	ELs and former ELs	African American	Asian	Hispanic	Multirace	White
Collicot	69%	43%	—	44%	—	—	—	—	—	72%
Cunningham	62%	52%	42%	45%	—	—	—	—	—	64%
Glover	74%	48%	36%	45%	—	—	—	—	—	76%
Tucker	58%	32%	31%	—	—	31%	—	—	—	90%
Pierce Middle	59%	36%	45%	13%	—	32%	80%	—	—	63%
Milton High	—	—	—	—	—	—	—	—	—	—
District	62%	39%	37%	27%	55%	29%	78%	41%	64%	67%
State	42%	23%	21%	15%	18%	19%	62%	20%	47%	50%

Note. High need = students with high need; Econ. dis. = students who are economically disadvantaged; SWD = students with disabilities; multirace = students who are multiple races but not Hispanic or Latino.

Table E20. Milton Public Schools: Four-Year Cohort Graduation Rates by Student Group, 2018-2021

Group	N (2021)	2018	2019	2020	2021	4-year change	State (2021)
All	284	94.1	96.0	94.9	94.4	0.3	89.8
African American/Black	61	88.5	93.6	93.3	90.2	1.7	84.4
Asian	16	100	100	95.0	100	0.0	96.1
Hispanic/Latino	14	100	100	88.2	100	0.0	80.0
Multirace, non-Hispanic/Latino	11	100	92.3	87.5	100	0.0	88.8
White	182	94.7	96.3	96.6	94.5	-0.2	93.2
High need	96	83.9	89.7	83.6	85.4	1.5	82.4
Low income	69	90.6	90.2	83.7	91.3	0.7	81.7
ELs	4	100	—	83.3	—	—	71.8
Students with disabilities	48	71.4	82.4	70.0	77.1	5.7	76.6

Table E21. Milton Public Schools: Five-Year Cohort Graduation Rates by Student Group, 2017-2020

Group	N (2020)	2017	2018	2019	2020	4-year change	State (2020)
All	236	96.8	94.9	96.8	95.8	-1.0	91.0
African American/Black	45	95.2	88.5	95.7	95.6	0.4	87.2
Asian	20	100	100	100	95.0	-5.0	95.8
Hispanic/Latino	17	100	100	100	88.2	-11.8	81.0
Multirace, non-Hispanic/Latino	8	88.9	100	92.3	87.5	-1.4	90.8
White	146	97.3	95.9	96.9	97.3	0.0	94.4
High need	67	92.6	86.2	91.0	85.1	-7.5	84.5
Low income	49	93.0	90.6	90.2	85.7	-7.3	84.1
ELs	6	100	100	—	83.3	-16.7	74.7
Students with disabilities	30	84.2	75.5	85.3	73.3	-10.9	79.3

Table E22. Milton Public Schools: In-School Suspension Rates by Student Group, 2018-2021

Group	2018	2019	2020	2021	4-year change	State (2021)
All	0.9	0.9	0.5	0.0	-0.9	0.3
African American/Black	2.0	2.2	1.6	—	—	0.3
Asian	—	—	—	—	—	0.0
Hispanic/Latino	—	—	—	—	—	0.2
Multirace, non-Hispanic or Latino	—	—	—	—	—	0.4
White	0.7	0.6	0.2	0.0	-0.7	0.3
High need	1.6	2.2	1.3	0.2	-1.4	0.4
Economically disadvantaged	1.7	3.3	1.7	—	—	0.3
ELs	—	—	—	—	—	0.1
Students with disabilities	2.2	2.8	1.4	0.3	-1.9	0.6

Table E23. Milton Public Schools: Out-of-School Suspension Rates by Student Group, 2018-2021

Group	2018	2019	2020	2021	4-year change	State (2021)
All	0.5	1.1	0.8	0.2	-0.3	0.5
African American/Black	1.4	3.0	2.7	—	—	0.6
Asian	—	—	—	—	—	0.1
Hispanic/Latino	—	—	—	—	—	0.5
Multirace, non-Hispanic or Latino	—	—	—	—	—	0.7
White	0.3	0.7	0.5	0.2	-0.1	0.5
High need	1.1	1.8	1.3	0.7	-0.4	0.7
Economically disadvantaged	0.9	2.5	1.9	—	—	0.7
ELs	—	—	—	—	—	0.3
Students with disabilities	1.5	2.6	1.9	0.9	-0.6	1.1

Table E24. Milton Public Schools: Dropout Rates by Student Group, 2018-2021

Group	N (2021)	2018	2019	2020	2021	4-year change	State (2021)
All	1,118	0.6	0.0	0.2	0.1	-0.5	1.5
African American/Black	190	2.0	0.0	0.5	0.5	-1.5	1.8
Asian	70	0.0	0.0	0.0	0.0	0	0.3
Hispanic/Latino	64	0.0	0.0	1.8	0.0	0	3.2
Multirace, non-Hispanic/Latino	40	0.0	0.0	0.0	0.0	0	1.4
White	751	0.3	0.0	0.0	0.0	-0.3	1.0
High need	291	0.9	0.0	0.9	0.3	-0.6	2.7
Economically disadvantaged	150	0.0	0.0	1.7	0.7	0.7	2.9
ELs	13	0.0	—	0.0	0.0	0	5.8
Students with disabilities	182	1.7	0.0	0.0	0.0	-1.7	2.4

Table E25. Milton Public Schools: Advanced Coursework Completion Rates by Student Group, 2019-2021

Group	N (2020)	2019	2020	2021	3-year change	State (2021)
All	552	95.0	94.4	96.2	1.2	65.3
African American/Black	103	83.3	83.0	91.3	8.0	54.9
Asian	31	100	100	100	0.0	84.3
Hispanic/Latino	31	100	87.1	93.5	-6.5	50.2
Multirace, non-Hispanic/Latino	20	100	100	100	0.0	65.5
White	364	97.3	97.8	97.3	0.0	69.6
High need	154	79.6	76.7	86.4	6.8	47.7
Economically disadvantaged	91	79.1	76.3	85.7	6.6	49.0
ELs	5	—	—	—	—	28.1
Students with disabilities	91	71.4	68.5	82.4	11	33.1