

Needham Public Schools

Comprehensive District Review Report

January 2022



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Executive Summary

The Massachusetts Department of Elementary and Secondary Education (DESE) contracted with the American Institutes for Research® (AIR®) to conduct a comprehensive review of Needham Public Schools (hereafter, Needham) in January 2022. Data collection activities associated with the review focused on understanding how district systems, structures, and practices operate to support the district continuous improvement efforts. The review focused on the six standards (and related indicators) that DESE has identified as being important components of district effectiveness.

The tables in this summary highlight the main strengths and areas for growth for each standard that surfaced from the review by the AIR team. In addition, DESE staff provided recommendations for the district, based on the findings of strengths and areas of growth identified.

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

As a district, Needham has long-serving leaders at several levels. The superintendent is in his 16th year in the role, several school committee members have served multiple terms, and other roles—such as the assistant superintendent for finance and the town manager—also have long tenures in their positions. These long tenures have contributed to long-term working relationships that appear collaborative and productive. Multiple interviewees described the working relationship among key district leaders, including the superintendent, the school committee, and the teachers' association, as positive. Evidence included the presence of several cross-entity committees and relationships, including one devoted to diversity in the town, the Race, Equity, Access, and Leadership (REAL) Coalition. In particular, a review of district documents and other evidence showed the following:

- **District Leadership.** The superintendent was appointed in 2006. The central office leadership team includes assistant superintendents of student services, human resources, finance, and teaching and learning, as well as a director of strategic planning and community engagement.
- **School Committee Structure.** The district is governed by a school committee with seven members, elected for staggered three-year terms.
- **District Improvement Plan.** The district has a strategic vision, encapsulated by the Portrait of a Needham Graduate (PONG). This document, presented to the school committee in fall 2020, describes the five characteristics the district hopes to cultivate in all students. Supporting documents reviewed for this report further describe action plans and supporting activities that various actors in the system will take to support the development of these characteristics in students.

Curriculum and Instruction

Needham has a staff infrastructure to support curriculum adoption and use, including an assistant superintendent of teaching and learning, various subject directors, and coordinators. A defined set of curricular materials varied across levels in the district. In particular, a review of documents and data found the following:

- **Curriculum Selection and Use.** The district has a defined set of districtwide curricular materials, and the majority of curriculum materials are publicly available on the district website. Specific subject curricular materials for Grades K–5, including purchased programs, are defined and publicly available. Defined materials for Grade 6–12, such as curriculum maps, are defined and publicly available in Rubicon Atlas. However, few teachers at the upper grade levels spoke of relying on these materials. The district has a process to select curriculum materials.
- **Classroom Instruction.** The district is developing specific instructional expectations for Tier 1 instruction, including instructional approaches to support the characteristics defined in the PONG (e.g., being communicators and collaborators).
- **Access to Coursework.** The district has a variety of academic offerings at the high-school level, including some limited opportunities for interdisciplinary learning. A document review and interviews indicated a variety of elective courses available at the high-school level. The team found evidence of tracking at the high-school level, including the need for teacher recommendations for access to Advanced placement (AP) courses, but interviewees also described a procedure for appealing this process and providing access to previously denied students. The team found evidence of a growing selection of offerings at the middle-school level. Interviewees reported that middle-school tracking, especially for mathematics, had been eliminated.

Assessment

Needham has several tools for assessment and data use, although the use of data and the existence of structures for data use varies across schools. Findings from interviews and a document review include the following:

- **Assessments.** The district uses the following assessments to measure and monitor student performance: At the elementary level, staff use Lexia, STAR, and district-developed formative assessments for both ELA and mathematics. At the middle-school level, staff use STAR and IXL for mathematics as well as district-developed formative assessments for both ELA and mathematics.
- **Data Use.** The district has some systems for supporting data use; however, the data review procedures are neither consistent nor universal across all schools. Further, although there are some data meetings to review data at the elementary level, such as Fountas & Pinnell benchmarks, data meetings at higher grades appear to be confined to MCAS data and MCAS item review.

- **Sharing Data.** The district has some mechanisms for sharing data with families, although communication is limited to report cards. Interviewees noted that, at the time of the visit, there was no central repository of data for staff to access, although one interviewee reported an effort to integrate recently collected data into the district’s student information system.

Human Resources and Professional Development

Interviews and a document review indicated that Needham had an established human resources infrastructure, including processes for recruiting, hiring, and evaluating staff. In particular, interviews and a review of documents found the following:

- **Educator Pipeline.** The district plans for and addresses staffing need by using enrollment projections, involving both school and district leaders in the hiring process, and using diversity-oriented committees to support the diversification of applicant pools and the staff overall.
- **Evaluation and Recognition.** The district has programs in place to support new teachers and recognize outstanding teachers, including developing coaching roles, which allow more experienced teachers an opportunity to lead and newer teachers to have support.

Student Support

Needham has many student support structures in place to assess issues related to school climate and provide support based on students’ academic and nonacademic needs. In addition, Needham demonstrates efforts to continuously assess students’ needs and thus has emerging supports based on newly identified student needs. Stakeholders described and a document review confirmed that Needham had dedicated staff and established systems for monitoring school climate, providing proactive tiered supports for students’ academic and social-emotional needs, and communicating with families. The following are key findings from the review:

- **School Climate.** The district makes sure that schools are safe and supportive by working to create what participants called a “supportive” community that is also “reflective and thoughtful.” Reviewed documents describe supports for student safety and well-being, including a district mental health team being developed during the 2021-2022 school year for implementation in 2022-2023, as well as comprehensive training on discipline practices.
- **Tiered Supports.** The district offers the following range of additional academic and nonacademic supports: emerging tiered systems of support structures, including student support teams in schools; newly selected social-emotional screening tools; and roadmaps for the full implementation of tiered supports.
- **Family Engagement.** Collaborative relationships with parents and families include a special education parent advising committee of parents of children with special needs and a parent group for families of English learners (ELs). The district makes efforts to diversify those groups and hold meetings at times and in formats to increase the number of families who can attend.

Financial and Asset Management

In Needham, financial management is well documented, adequate resources are provided, and tracking and audit systems are in place. In addition, interviewees described an annual capital planning process that has resulted in consideration of a number of capital plans. In particular, interviews and a review of key budget documents indicated the following:

- **Adequate Budget.** The district has an annual operating budget of \$79,417,218 (fiscal year 2021 figures, not including state and federal grants and other additional funds).
- **Tracking.** The district has a business office, with an assistant superintendent for finance and operations, an assistant superintendent, an assistant director of financial operations, a business and operations coordinator, and four accountants/accounting specialists.
- **Capital Planning/Maintenance.** The district has tentative plans to renovate or replace several district buildings. However, at the time of the site visit, a definitive agreement between the district and town was not in place. In addition, a firm timeline was not in place for a vote on the long-term capital plan to go before town meeting or a capital override to voters.

In general, interviewees reported strong relationships among district leaders, including the school committee, and members of town government in regard to both fiscal and capital management and planning.

District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, 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 Reviews identify systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results. In addition, 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 the 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 AIR subcontractors, with expertise in each district standard, reviews documentation and extant data prior to 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 Teachstone Classroom Assessment Scoring System (CLASS) protocol, developed by the Center for Advanced Study of Teaching and Learning (CASTL) at the University of Virginia.² Following the site visit, the AIR team 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 before AIR finalizes and submits the report to DESE. DESE reviews and then sends the report to the district for factual review before publishing it on the DESE website.

Site Visit

The site visit to Needham took place on January 24–28, 2022. The site visit included approximately 21 hours of interviews and focus groups with approximately 112 stakeholders, including school committee members, district administrators, school principals, school staff, middle- and high-school students, students' families, and teachers' association representatives. The review team conducted district-level interviews with the superintendent; the assistant superintendents for finance, teaching and learning, student supports, and human resources; the school committee; and leaders of the local teachers' association. In addition, the review team conducted eight teacher focus groups, including two virtual elementary-school focus groups with five elementary-school teachers each, as well as focus groups at the high school (eight high-school teachers) and two middle schools with seven and eight middle-school teachers, respectively. Additional focus groups were held with six

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/>.

high-school specialists (e.g., special educator and English learner [EL] specialists and school counselors) and two focus groups of specialists at the middle-school level, with eight and six specialists in each group, respectively. At the elementary-school level, the specialist roles were included in the two elementary virtual focus groups. The two school administrator focus groups included the high-school principal, the two middle-school principals, and the five elementary-school principals. Three members of the school committee also were interviewed, including the current chair.

The site team also conducted 77 observations of classroom instruction in 8 Needham schools. The team conducted instructional observations using the CLASS protocol.

Additional information is in the appendices. A list of review team members, information about review activities, and the site visit schedule are in Appendix A. Appendix B provides information about district enrollment, attendance, and expenditures. Summary data from the instructional observations are in Appendix C. Appendix D contains additional resources to support implementation of DESE’s *District Standards and Indicators*. Lastly, Appendix E contains student performance data.

District Profile

Needham is led by a superintendent who is in his 16th year in the role, as well as a central office staff, including assistant superintendents or directors for curriculum, student services, finance, and human resources. The district is governed by a school committee composed of seven members, elected for a three-year term.

In the 2021-2022 school year, the district had 421 teachers, with 5,515 students were enrolled in the district’s 8 schools. Table 1 provides an overview of student enrollment by school.

Table 1. Needham Public Schools: Level, Grades Served, and Enrollment, 2021-2022

School	Level	Grades served	Enrollment
Broadmeadow	Elementary school	K-5	516
High Rock School	Middle school	6	450
John Eliot	Elementary school	K-5	431
Needham High	High school	9-12	1,669
Newman Elementary	Elementary school	PK-5	665
Pollard Middle	Middle school	7-8	665
Sunita L. Williams Elementary	Elementary school	K-5	506
William Mitchell	Elementary school	K-5	450
Total			5,515

Note. Data came from [Enrollment Data \(2021-2022\)–Needham \(01990000\) \(mass.edu\)](#), as of October 1, 2021.

Student enrollment has remained steady in the past five years (5,588 in 2017; 5,515 in 2022). In 2022, students from low-income backgrounds made up 8.4 percent of the district in 2022. (The state rate was 43.8 percent.) The district served a similar percentage of students with disabilities as the state (17.9 percent versus 18.9 percent), and smaller percentages of ELs (3.2 percent versus

11 percent), and students whose first language is not English (11.1 percent versus 23.9 percent).³ Additional enrollment figures by race/ethnicity and high-need populations (i.e., students with disabilities, those who are economically disadvantaged, 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 greater than the median in-district per-pupil expenditure for 31 K–12 districts of similar size (5,000-7,999 students) in fiscal year 2020: \$18,165 versus \$14,895. Actual net school spending was greater than the requirement in the Chapter 70 state education aid program (Table B4 in Appendix B).

School and Student Performance

Needham has two schools identified as Schools of Recognition⁴ (Sunita Williams and Pollard Middle).

The percentage of students meeting or exceeding expectations on the Next-Gen MCAS (Massachusetts Comprehensive Assessment System) is higher than the average state rate for all tested grades and subject areas. Tables 3–5 provide an overview of student performance in English language arts (ELA), mathematics, and science by grade level between 2018 and 2021.

Table 3. Next-Generation MCAS English Language Arts: Percentage Meeting or Exceeding Expectations, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	421	72%	74%	70%	-2	51%	19%
4	438	69%	69%	70%	1	49%	21%
5	439	72%	73%	77%	5	47%	30%
6	390	79%	81%	72%	-7	47%	25%
7	447	77%	77%	70%	-7	43%	27%
8	421	85%	86%	69%	-16	41%	28%
3–8	2,556	76%	76%	72%	-4	46%	26%
10	366	—	84%	90%	—	64%	26%

Note. Data came from [2021 Accountability Data—Needham \(01990000\) \(mass.edu\)](#).

Table 4. Next-Generation MCAS Math: Percentage Meeting or Exceeding Expectations, 2018-2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/below
3	421	67%	65%	49%	-18	33%	16%
4	438	61%	59%	60%	-1	33%	27%
5	438	66%	69%	62%	-4	33%	29%
6	388	79%	76%	60%	-19	33%	27%
7	446	80%	85%	72%	-8	35%	37%

³ Source: [Selected Populations \(2021-2022\)—Needham \(01990000\) \(mass.edu\)](#).

⁴ Refers to a subset of schools classified as not requiring assistance or intervention and recognized for their academic accomplishments. Schools of Recognition are identified for high achievement, high growth, and exceeding targets.

8	423	81%	83%	68%	-13	32%	36%
3-8	2,554	72%	73%	62%	-10	33%	29%
10	367	—	88%	85%	—	52%	33%

Note. Data came from [2021 Accountability Data—Needham \(01990000\) \(mass.edu\)](#).

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

Grade	N (2021)	2019	2020	2021	3-yr change	State (2021)
5	437	65%	—	59%	-6	42%
8	405	76%	—	66%	-10	41%
5 and 8	842	70%	—	62%	-8	42%
10	—	—	—	—	—	—

Note. Grade 10 results for the spring 2021 Science, Technology, and Engineering (STE) test 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 came from [2021 Accountability Data—Needham \(01990000\) \(mass.edu\)](#).

In addition, the district's four- and five-year graduation rates, 98.5 percent in 2020 and 98.2 percent in 2019, respectively, are both greater than the state averages of 89 percent and 90.1 percent, respectively.⁵

⁵ Source: [Cohort 2020 Graduation Rates—Needham \(01990000\) \(mass.edu\)](#).

Leadership and Governance

As a district, Needham has long-serving leaders at several levels. The superintendent is in his 16th year in the role, several school committee members have served multiple terms, and other roles—such as the assistant superintendent for finance—also have long tenures in their positions. These long tenures have contributed to long-term working relationships that appear collaborative and productive. Multiple interviewees described the working relationship among key district leaders, including the superintendent, the school committee, and teachers’ association, as positive. Evidence included the presence of several cross-entity committees and relationships, including one devoted to diversity in the town, the Race, Equity, Access, and Leadership (REAL) Coalition. In particular, interviews and a review of documents showed the following:

- **District Leadership.** The superintendent was appointed in 2006. The central office leadership team includes assistant superintendents of student services, human resources, finance, and teaching and learning, as well as a director of strategic planning and community engagement.
- **School Committee Structure.** The district is governed by a school committee with seven members, elected for staggered three-year terms.
- **District Improvement Plan.** The district has a strategic vision, encapsulated by the Portrait of a Needham Graduate (PONG). This document, presented to the school committee in fall 2020, describes the five characteristics the district hopes to cultivate in all students. Supporting documents reviewed for this report further describe action plans and supporting activities that various staff in the system will take to support the development of these characteristics in students.

Table 6 summarizes key strengths and areas for growth in leadership and governance.

Table 6. Summary of Key Strengths and Areas for Growth: Leadership and Governance Standard

Indicator	Strengths	Areas for growth
School committee governance	<ul style="list-style-type: none"> ▪ The school committee has shared responsibility for the district’s equity work and has been involved in the development of the PONG document. 	
District and school leadership	<ul style="list-style-type: none"> ▪ District leaders collaborate across departments and are open to communication with stakeholders, using surveys and various committees to promote participation and input. 	<ul style="list-style-type: none"> ▪ Consider ways to increase leadership roles for teachers.
District and school improvement planning	<ul style="list-style-type: none"> ▪ Stakeholders across the district are involved in the budget and planning 	

	processes, including multiple stakeholders involved in the development of the PONG document.	
Budget development	<ul style="list-style-type: none"> ▪ The district ensures that the budget is equitable and funds are allocated to the highest needs' areas, schools, and students. 	

School Committee Governance

It is clear from interviews and a document review that the school committee in Needham upholds its responsibilities under Massachusetts laws and regulations and acts as an advocate in the community for meeting students' needs. Guided by the district strategic plan, the PONG, the school committee places a special emphasis on the district's equity goals. There is evidence of systems in place to facilitate feedback and communication with the superintendent, the teachers' association, the students, and the community.

Focuses on Improvement. (Strength) As evidenced by interviews with committee members and district leaders as well as a review of school committee agendas and minutes, school committee members were very involved in the development of the PONG, and they have aligned their work to its goals. The committee places a strong emphasis on the principles of equity as outlined in the strategic plan. Multiple district leaders reported that the school committee shared responsibility for the equity work with the district and the community, a finding supported by a review of meeting agendas and minutes. A review of school committee meeting minutes, as well as the superintendent's blog, indicated ongoing discussions about immediate and long-term capital needs in the district. Reports to the school committee in fall of 2021, for example, included reports of improvements in diversifying staff, mentoring, and retaining staff, some of which included collaboration with joint-school-town committees on diversity such as the REAL Coalition.

Establishes a Culture of Collaboration. The school committee has established several systems for including other voices in decision making. The committee includes a nonvoting student member who represents the student body. The review team found evidence of this student's involvement in the school committee minutes. The Needham High School's student advisory group makes presentations to the school committee six times per year. The committee frequently interacts with various other school and community groups for developing the budget and a strategic plan. School committee minutes from fall 2021, for example, show several stakeholders weighing in on capital improvement requests. In addition, various school and town government parties also discussed the long-term capital plan in several fall 2021 meetings. Interviewees reported a desire for a collaborative relationship among the committee members, district leaders, and the teachers' association, as evidenced by the use of interest-based bargaining. Both school committee members and teachers' association representatives said that this collaborative relationship largely focused on collective bargaining.

Fulfills Its Legal and Fiduciary Responsibilities, as Defined in Massachusetts State Law. The school committee plays a direct role in developing and approving the budget, working with district leaders and the community to create it. The committee considers equity when distributing resources with several district leaders, discussing their commitment to equity when making decisions such as class size ratios. These findings are supported by a review of district financial reports as well as multiple interviews with district leaders. In addition, a review of meeting minutes showed that both school committee meetings from December 2021 included district leaders describing equity as a key priority in planning the budget for the coming fiscal year.

District and School Leadership

District and school leaders work to promote a culture of collaboration by sharing leadership through multiple tiers of teams, including a central office leadership team and school leadership teams. These team members sometimes convene as a consolidated district leadership team. They build in many avenues for engaging individuals within the district, including surveys and individual meetings. School-level stakeholders, however, reported limited leadership opportunities for teachers.

Leadership and Engagement. (Strength) District leaders strive to create opportunities for other stakeholders to voice their opinions on some district issues, as evidenced by interviews with district leaders and community members, as well as a review of survey documents and district leadership team agendas from 2021. Examples include regular surveys, numerous committees and councils, and a superintendent whom parent and administrator focus group participants described as open to meeting with the community, staff, and students. District leaders and school committee members said that the superintendent took a collaborative approach to developing the district budget. Collaboration on the budget is primarily at the governance level, involving the school committee, the superintendent, and town officials. Teachers' association representatives reported that they had input on schedule changes and aspects of scheduling. Some interviewees reported that they could not contribute their opinions for budgeting purposes, citing, for example, their absence of input about, for example, professional development (PD) or equitable resources across staff serving different groups of students. A review of school committee meeting minutes, which supported this observation, indicated an absence of strategies to engage school staff in the identification of priorities in these areas.

Focus on Improvement. Through the recent push for a more equitable education system, district leaders took concrete and ambitious steps toward closing opportunity gaps between students with the highest needs and their peers, as evidenced by a review of the district's strategic plan and interviews with district, school, and community stakeholders. Although school and district leaders provide PD to teachers, school staff differ in their accounts of how or whether they are engaged in the selection of PD topics. Some school-level staff reported that they could not provide much input to "grade-level leaders" within schools who help guide PD decisions. Data, including benchmark assessments and regular surveys, are frequently used to measure the effectiveness of new academic supports for students who are struggling. One district leader described assessing needs each year using data and the discussion between the school committee and district leaders on how to allocate resources, saying, "We try to use as much data to support what we're doing . . ." "We try to use schools in the neighborhood and comparable communities in the Commonwealth."

Leadership Development and Support. (Area for Growth) Several school-level stakeholders reported an insufficient number of leadership opportunities for teachers within the schools, identifying this as a possible area for growth. The team did not find evidence of a career track for teachers hoping to move into administrative positions. Principals did report that they felt very well supported in their jobs, citing examples including supportive colleagues who served as thought partners.

District and School Improvement Planning

In collaboration with both internal and external stakeholders, the district created its strategic plan known as the PONG. This document serves as a strategic plan for Needham through at least 2025. School-level teams then created a school improvement plan based on the elements present in the district's strategic plan. The strategic plan and its accompanying equity initiative were guided by results from several needs assessment activities, including perception data, state and local student performance data, and an equity audit. Interviews with district leaders and a review of school improvement plans indicated that all work in the district was aligned to the strategic plan and monitored according to it. For example, budget requests must be justified through alignment to the strategic plan and monitored.

Stakeholder Engagement and Reflection. (Strength) Although reports of stakeholder engagement in budgeting varied, engagement in improvement planning is a strength. Interviews with multiple district leaders and a review of district leadership team and school committee meeting agendas showed that the district engaged with school- and district-level staff, as well as students, families, and the community. Examples of this engagement include student feedback groups, neighborhood visits by the superintendent, and input from the local Olin College of Engineering and the local Google facilities.

Improvement Plans. Each school convenes a school council to develop its local improvement plans, aligned to the PONG. Although some interviewees described the PONG as a strong vision for the district, school-level staff and students said that the PONG did not significantly influence daily operations and activities at the school level. For example, one interviewee noted, "It is just vague prescriptions done in adjectives of like what a Needham graduate is." A review of school improvement plans indicated that some plans included both the attributes described in the PONG, as well as the supporting strategic priorities. District-level staff said that the document was a "vision statement" or a "big picture," suggesting a disconnect with some school-level stakeholders. Approximately half of the students in the high-school focus group knew of the PONG; one student said that the qualities described in the document were admirable, but "they don't really give you any prescriptions about how to get there." The occasional disconnect between the district's vision and school-level stakeholders also is evidenced by the differing views of instructional stakeholders. One teacher described the PONG as helpful in offering guiding principles for instruction. Others stated that the PONG often was discussed at the administrative level, but it was not communicated well with teachers. A second teacher at another grade level said, "I'm sure [the PONG is] still a thing. I just don't think I've heard [about] it in a long time."

Budget Development

The team found clear and consistent evidence that Needham strategically aligned its budget to the goals and strategies in the improvement plans, with a special emphasis on equity. Components of the budget are tracked and monitored for effectiveness. The district follows local and state guidelines for budget development and review.

Budget Development and Monitoring. A review of financial documents and interviews with district and community leaders involved in budgeting reported following a structured timeline and review process. School leaders discussed the process for making budget requests that included articulating the request's alignment to the district's strategic goals. Opportunities to evaluate budget effectiveness are built in and monitored throughout the process, including continuous reviews of state assessment data and qualitative perception data. Some school-level stakeholders expressed concerns that their voices were not heard, and they could not influence budgeting, with the absence of school stakeholder-selected PD cited as a primary reason.

Resource Allocation. (Strength) Multiple interviewees, including district leaders, school leaders, and school committee members, reported a shift in district priorities to ensure that the budget was equitable and funds were allocated to the highest needs' areas, schools, and students. Student data are used to monitor the budget for effectiveness. An example is using student assessment data to analyze the effectiveness of a new reading interventionist at one school.

Recommendations

- The district should consider ways to increase leadership opportunities for teachers.

Curriculum and Instruction

Needham has a staff infrastructure to support curriculum adoption and use, including an assistant superintendent of teaching and learning, various subject directors, and coordinators. A defined set of curriculum materials varied across levels in the district. In particular, a review of data found the following:

- **Curriculum Selection and Use.** The district has a defined set of districtwide curriculum materials, and the vast majority of curriculum materials are publicly available on the district website. Specific subject curriculum materials for Grades K–5, including purchased programs, are defined and publicly available. Defined materials for Grade 6–12, such as curriculum maps, are defined and publicly available in Rubicon Atlas. Documents illustrated a process used to select curriculum materials in the recent past, including the current elementary mathematics program.
- **Classroom Instruction.** The district is developing specific instructional expectations for Tier 1 instruction, including instructional approaches to support the characteristics defined in the PONG (e.g., being communicators and collaborators).
- **Access to Coursework.** The district has a variety of academic offerings at the high-school level, including some limited opportunities for interdisciplinary learning. A document review and interviews indicated a variety of elective courses available at the high-school level. A review of data indicated tracking at the high-school level, including the need for teacher recommendations for access to Advanced placement (AP) courses, but interviewees also described a procedure for appealing this process and providing access to previously denied students. Data also indicated a growing selection of offerings at the middle-school level, and interviewees reported that middle-school tracking, especially for mathematics, had been eliminated.

Table 7 summarizes key strength and areas for growth in curriculum and instruction.

Table 7. Summary of Key Strengths and Areas for Growth: Curriculum and Instruction Standard

Indicator	Strengths	Areas for growth
Curriculum selection and use	<ul style="list-style-type: none"> ■ Needham has a structured curriculum selection process that involves committees of stakeholders, reviewing alignment to standards, and a piloting process. 	<ul style="list-style-type: none"> ■ Ensure that curricular materials are aligned to the content and rigor of the appropriate Massachusetts curriculum frameworks and to definitions of high-quality instructional materials.
Classroom instruction	<ul style="list-style-type: none"> ■ Needham schools are working to provide effective instruction that challenges and supports all students using principles such as 	

	Universal Design for Learning; observations suggest that instruction is at rigorous at least some of the time.	
Student access to coursework	<ul style="list-style-type: none"> Needham offers a wide range of academic experiences relevant for students’ goals, especially at the high-school level, including dual enrollment and Advanced Placement courses, with an emphasis on interdisciplinary programs in the middle and high schools. 	<ul style="list-style-type: none"> Provide students and families frequent, timely, and thorough information about advanced coursework and opportunities to move between college prep, honors, and accelerated levels.

Curriculum Selection and Use

Needham provides all teachers with standards-aligned curricular materials. In Grades 1–5, Think Math and Engage NY are the primary materials used; neither is listed in the [DESE CURATE](#). Mathematics materials are listed as primarily teacher or department created at the high-school level and are not specified on the district’s CURATE curriculum list for Grade 6–8. In ELA, Grades 1–5 use the Teachers’ College Units of Study, as well as the FUNdations phonics curriculum; neither is listed in the [DESE CURATE](#) for ELA. All ELA materials in Grades 6–12 are listed as teacher or department created. In science as well as history/social science, all materials listed in kindergarten through grade 12 are described in the district’s CURATE curriculum list as district, department, or teacher created. However, few teachers in upper grade levels mentioned relying on these materials during their interviews. One teacher, for example, described collecting instructional materials as “informal.” Another teacher reported that although required skills and standards were communicated to teachers in the upper grades, wide discretion in material use took place. A third teacher reported greater uniformity of teaching and materials during the height of the pandemic, but “now that we are back, we are trying to get out of that sameness because teachers need to be able to do whatever you want with your class, as long as you go into the summary performative [sic] assessment.”

District and school leaders, instructional staff, and students reported examples of continuous improvement and collaboration among instructional staff, including the inclusion of a racial literacy curriculum—REAL as outlined in the Equity Plan for 2020-2021 and the Racial Literacy Curriculum Grades K–5; a wellness curriculum described in the Wellness K–12 Program Review; as well as interdisciplinary courses in middle and high school, such as the [Greater Boston Project](#), an interdisciplinary course taught by multiple teachers that allows students to create a project that students believe would benefit the community. School leaders and instructional staff reported an articulated curriculum from K through 12 in ELA and mathematics as found in [the Teaching and Learning Hub K–5 Curriculum](#) and the [curriculum database ATLAS for Grades 6–12](#) and a review of the K–9 Digital Citizenship curriculum outlined in the technology plan for 2018-2023.

Decision-Making Processes. (Strength) District and school leaders, as well as instructional staff, described the curriculum review process as following a structured process. This process begins with identifying materials that align with the standards using a rubric, then piloting with teachers who volunteer for the process at the affected grade levels to evaluate the materials, before arriving at a final decision. School leaders, instructional staff, families, and students identified inclusion of diversity in the curriculum as a desired goal, but one whose implementation was inconsistent. Interviewees said that opportunities for incorporating diverse voices into the curriculum were available mostly in social studies, science, and mathematics. Instructional staff described working to find more examples to showcase diverse scientists and mathematicians, as outlined in the Resources for Developing an Anti-Racist/Bias Curriculum in the Needham High School Science Department. It is clear from both interviews and focus groups that stakeholders, including district and school leaders, understand and are involved in the decision-making process for evaluating and selecting curricula, a process described in the Program Review Memo. This document outlines a four-year cycle timeline. (Two curriculum areas are reviewed per cycle: one special area and one academic area.) Curriculum review committees are open to volunteers, from district leaders to instructional staff, and stakeholders know what areas are being reviewed based on the review cycle. School leaders and instructional staff said that the recent adoption of a new elementary mathematics program after a summer pilot at the elementary level illustrated this approach. This set of materials also was cited in the district’s CURATE curriculum list.

Documented Curriculum. (Area for Growth) Instructional staff, families, and students reported that the district mostly documented its curricular materials, although the district was aligning curriculum across and within elementary-, middle-, and high-school grade levels. Alignment is an area for continued growth because the most recent reports for middle-school and high-school program reviews are from 2018. As noted earlier, most curricular materials used in the district are not rated in the CURATE list or are locally produced by teachers and other district staff. Many district curricular materials are documented and publicly available online, including a hub for K–5 literacy, mathematics, and equity curricula, as well as a Rubicon Atlas repository of materials for various subject in Grades 6–12 and a published course of studies for the high school. Instructional staff, school leaders, and families reported a documented curriculum at the elementary- and middle-school levels, particularly for mathematics. Instructional staff said that vertical alignment of curriculum for K–12 was being refined. For example, a new elementary social studies coordinator is supporting vertical articulation at the elementary level, as evidenced by the “under review” comments in the Elementary District Review Document List: curriculum list and CURATE ratings for Grades K–5. Parents said that they received information about curriculum at parents’ nights and had access to it on the district website. Teachers described a process for elementary book audits in the library to ensure equity in culturally diverse materials; this was confirmed by a review of the 2020–2021 Equity Plan and [School Highlights: Equity Work Across the District—Needham Public Schools](#). Some students have opportunities to opt into interdisciplinary or advanced level courses. Students expressed a desire for more interdisciplinary programs similar to the [Greater Boston Project](#). Instructional staff, however, noted challenges to implementing interdisciplinary programs because of the variety of levels (honors, accelerated, and AP at the high-school grades).

Taught Curriculum. District leaders, school leaders, and instructional staff reported using collaborative planning time to ensure consistency and coherence across classrooms and schools, specifically in ELA

and mathematics. Elementary teachers reported a mentor system for newer teachers to experience coaching and coteaching while developing collaborative planning skills. Interdisciplinary work is a district priority, communicated in the PONG characteristics and in individual school-level improvement plans. Instructional staff, school leaders, and students identified interdisciplinary courses in middle school and in grade 9 and the grade 12 Greater Boston Project, but some interviewees described these opportunities as limited to a small portion of the student body. Several courses in the published high-school course of study do include interdisciplinary themes. School leaders and instructional staff described using collaborative planning for interdisciplinary courses; for example, integrating mathematics and art for the unit on fractions and incorporating reading and writing with science and social studies at the elementary level.

Classroom Instruction

Needham district leaders, school leaders, instructional staff, families, and students reported the implementation of a social-emotional learning curriculum and a new racial literacy curriculum in 2020-2021, as well as supports for differentiated instruction throughout Grades K–12. In addition, a review of PD documents and agendas for mathematics department meetings for Grades 6–8 and at the high school indicated interdisciplinary PD for instructors for classes offered at the elementary-, middle-, and high-school levels. Teacher leaders reported that, although promising, the science, technology, engineering, art, and mathematics (STEAM) program offering interdisciplinary art, music, engineering, and science could not be sustained because of the scheduling, materials, staffing, training needs, and bus schedules. However, instructional staff highlighted a middle-school data science course in which students learned how to visually represent data. Instructional staff and school leaders described coaches taking a mentor role so that they could coteach with newer staff or learn a new strategy and support collaborative planning with more tenured staff

Providing access to technology is a particular strength for the district. Multiple groups, including district leaders, students, teachers, and families, said that Needham had a one-to-one ratio of students to computers. Stakeholders said that they saw this as a step toward providing equitable access to learning opportunities in the current context as well as the future.

Nine observers visited Needham, focusing primarily on instruction in the classroom during the week of January 24, 2022. The observers conducted 77 observations in a sample of classrooms across grade levels, focused on literacy, ELA, and mathematics.

The CLASS protocol guided all classroom observations in Needham. The protocol included three grade-band levels: K–3, Upper Elementary (4–5), and Secondary (6–12). The K–3 protocol has 10 classroom dimensions related to 3 domains: Emotional Support, Classroom Organization, and Instructional Support. The Upper Elementary and Secondary protocols have 11 classroom dimensions related to 3 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 classroom visit, the observer rates each dimension (including Student Engagement) on a scale of 1 to 7. A rating of 1 or 2 (low range) indicated that the dimension was never or rarely evident during the visit. A rating of 3, 4, or 5 (middle range) indicated 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) indicated that the dimension was reflected in all or most classroom activities and in a way that included all or most students.

In Needham, ratings are provided across three grade bands: K–5, 6–8, and 9–12. For each grade band, ratings are provided across the overarching domains, as well as the levels of individual dimensions within those domains.

The full report of findings from observations conducted in Needham is in Appendix C, and summary results are in Tables 17, 18, and 19 in Appendix C. In summary, findings from the observations were as follows:

- **Emotional Support.** Ratings fell in the high end of the middle range at the K–5 grade band and the middle range for both the 6–8 and 9–12 grade bands.
- **Classroom Organization.** Ratings fell in the high range for all grade bands.
- **Instructional Support.** Ratings fell in the middle range for all grade bands.
- **Student Engagement.** For Grades 4 and above, where student engagement was measured as an independent domain, ratings fell in the high end of the middle range in the 4–5 grade band, and the high end of the middle range for both the 6–8 and 9–12 grade bands.

Overall, for the K–5 grade band, instructional observations suggest moderately strong emotional support, strong classroom organization, and moderately strong student engagement (Grades 4–5) and mixed evidence of consistently rigorous instructional support. For the 6–8 and 9–12 grade bands, instructional observations provide evidence of moderately strong emotional support, strong classroom organization, mixed evidence of consistently rigorous instructional support, and moderately strong student engagement.

Learning Experiences for Students. (Strength) Interviews and a review of the provided Universal Design for Learning (UDL) modules indicated that Needham schools were working to provide effective instruction that challenges and supports all students. UDL modules, for example, are self-guided PD tools provided to teachers to support their creation of engaging and accessible learning experiences for all students. Instructional observation scores in the middle range for the Instructional Support domain of the CLASS tool, across all grade spans, suggest that instructional practices are resulting in instruction that is sometimes rigorous for some students. District leaders, school leaders, instructional staff, families, and students reported social-emotional learning as an integral part of the curriculum and school day. High-school students begin the day with an advisory period (formerly homeroom) where social-emotional learning sets the tone for the day. Instructional staff and students described student choice options, including five grade 8 courses in which students choose the books they want to read. Students said that they felt motivated by being in

groups interested in similar texts and genres. At the high-school level, families and students reported positive impressions of and experiences with the ninth-grade interdisciplinary program pilot of three cohorts, in which instructors created one curriculum base integrating English, science, mathematics, and history. High-school students also reported appreciating the option for dual enrollment, such as virtual community college courses; students and families said that they would like to see these options expanded.

Adjustments to Practice. School leaders, instructional staff, families, and students described leveling, interventions/enhancements, feedback, and assessment as examples of both strengths and areas for improvement. School leaders, instructional staff, and families said that interventionists provided adequate support via scaffolding, grouping, or pull-out groups for students needing additional help. Teachers reported “finding ways to support students that are struggling, particularly students of color,” in STEAM subjects. For example, staff cited the Launching Scholars program, a summer and afterschool effort to foster a supportive and an engaging learning community for students underrepresented in mathematics to grow student excitement about mathematics. Instructional staff and school leaders stated that some interventionists took on a coaching role, coteaching a new strategy, or mentoring teachers. However, teachers reported that in science and social studies “there aren’t necessarily those individualized intervention classes,” so they needed to create differentiated classes themselves. Content in ELA and mathematics across grades is aligned to the appropriate level where it is taught. However, students reported that in high school it was difficult for them to move from a lower level to a more challenging one because they might not have the background necessary to succeed at the higher level. High-school students who moved from a more challenging level to a less challenging one said that they felt more success. Students reported that their opportunity to offer feedback to instructors varied depending on the course; sometimes teachers requested student feedback throughout the semester after each lesson; other times, such feedback requests came only at the end of the semester. Finally, instructional staff and school leaders identified EarlyBird as a new literacy assessment introduced in 2021-2022 and projects being introduced “as well as new ways to assess students’ knowledge because we . . . are trying to come up with other ways that, across the board, could still show knowledge.”

Learning Environment. School leaders, instructional staff, and students consistently reported and a document review indicated that schools had positive classroom climate and structures that created a positive learning environment in which staff attended to students’ social-emotional needs. Students, instructional staff, school leaders, and parents described student-centered classroom instruction strategies as motivating and engaging students. Nonetheless, students and teachers reported mixed implementation of these efforts, noting that the success of student collaboration could vary based on whether all group members stayed on task and participated actively. Families and students described an environment where students felt comfortable asking for help if needed and teachers were accessible outside the classroom. One student said,

When I was having a rough week, two different teachers noticed and pulled me aside to check in. They saw that I had not been participating in class as much and wanted to see if I needed to talk. The fact that they even noticed behavior that was unusual for me made me feel incredibly seen and cared about.

High-school students, in particular, reported some challenges, most notably describing the school as a high-pressure environment, where the source of that pressure for achievement came from adults and other students. Several students in the middle- and high-school groups stated that various kinds of support were available when students were struggling. The challenge for some students was when help was offered after school and students could not stay because of an absence of transportation.⁶

Student Access to Coursework

In Needham, students have access to a variety of academic course offerings, including honors and accelerated levels, with an emphasis on interdisciplinary programs in the middle and high schools. Enrollment in AP courses and dual-enrollment options requires a recommendation process for each participating student. This process may limit access, thus creating inequity in opportunity for some students who may be interested in these offerings. Reviewing the data of students who access these advanced courses and the policies that limit access to these opportunities is an area for refinement and growth.

Variety of Academic Offerings. (Strength and Area for Growth) Multiple interviewees said that the district offered a variety of academic experiences relevant for students within the middle-school and high-school grades, including three different academic levels: college prep, honors (“regular” level courses), and accelerated courses. The high school’s published course of study is extensive, containing numerous elective courses across subject areas. District leaders, teachers, and students reported that students went through a recommendation process before they could select high-school electives, select AP courses, or pursue dual-enrollment options. One teacher described the recommendation process as teachers having a discussion with students and then making a recommendation. The teacher said that students could override a teacher’s recommendation.

One student said that the dual-enrollment option had to be discussed and cleared with a guidance counselor. This creates a process that may limit students’ access to opportunities because individual students may need to “override” a recommendation from a teacher and/or a guidance counselor.

Students said that they had some autonomy to choose their electives for rotations, or changes in courses in different marking periods, and foreign languages in grade 7. The district has added electives at the middle-school level, such as data science and visualization and American Sign Language, to meet the needs and interests of students. Interviews with district leaders and a review of the high-school’s program of studies indicated that At the high-school level, students had options including honors and accelerated courses in addition to interdisciplinary courses. One student described the Greater Boston Project, a course offered only to seniors, as a “true project-based interdisciplinary course.” This interdisciplinary course is “a double period taught by in [sic] English, math, and a history teacher . . . and it’s group based, and it’s projects, and they go on field trips to Boston, create a project that they think would benefit the community.” However, because this course is a double block, “a lot of people choose not to take it because it takes up so much time in the schedule, and it’s not counted as an accelerated or AP class.”

⁶ According to the district website, afterschool late buses were not available during the 2021-2022 school year (see http://www.needham.k12.ma.us/departments/business_operations/transportation).

Some current areas of strength noted by district leaders in Needham include increasing “middle-school offerings for electives so that there’s more voice and choice there,” as well as introducing interdisciplinary courses in the five years before this review. It is clear from interviews that the district consistently focuses on improvement and ensures that district programs are aligned with students’ needs. Interviewees suggested that the district may need to improve on the variety of academic offerings, particularly to meet stated goals of more interdisciplinary opportunities for students. In addition, interviewees said that the district had three different academic levels (college prep, honors, and accelerated), and students had some opportunity to move between levels. Some interviewees reported, however, that opportunities for movement are not widely known or understood by all students and families. Similarly, students reported a need to further highlight dual-enrollment and AP options as alternatives as they plan their course of studies and pursue their college and career goals.

Equity of Access. (Area for Growth) Although students described district efforts to make coursework accessible for more students, including multilevel advanced tracks, structural barriers still limited equity of access to advanced courses. At the high-school level, students and specialists said that access to AP and other advanced courses was based on a recommendation by a student’s grade 8 teacher. The district has put some systems in place to offset this practice, including a process for students who do not receive a recommendation to be considered for enrollment. Students described challenges with this process because their previous coursework did not fully prepare them for advanced work: “Whatever path you start on, you have to be on.” Teachers and students identified a variety of elective courses that were more project and discussion based than testing based. Specialists and students said that access to before- or after-school academic and extracurricular activities were limited to students with alternate transportation only, noting that at one time the district offered a late bus after school.

School leaders, instructional staff, and families reported differentiated support and scaffolding from interventionists and specialists for mathematics and ELA, with less support for science and social studies. Parents and students described opportunities for leveling appropriate for students’ skills and readiness at elementary and middle school in the following examples:

- In high school, the chance to move to a less challenging level of coursework was easier than moving up, once students were placed in college prep, honors, accelerated, or AP courses.
- The choice for the levels began in grade 8, where students requested their level and were approved before entering high school.
- One student described the experience of taking honors freshman and sophomore years and discovering that it was easy, “so I tried accelerated AB my junior year. And the review stuff from that year, I hadn’t even learned in my honors classes. So, I was clearly behind . . . so I had to drop out because I didn’t know what we were learning from previous years.”

Recommendations

- The district should ensure that curricular materials are aligned to the content and rigor of the appropriate Massachusetts curriculum frameworks and to definitions of high-quality instructional materials.
- The district should provide students and their families frequent, timely, and thorough information about advanced coursework and opportunities to move between college prep, honors, and accelerated levels.

Assessment

Needham has several tools for assessment and data use, although the use of data and the existence of structures for data use varies across schools. Findings from interviews and a document review include the following:

- **Assessments.** The district uses the following assessments to measure and monitor student performance: At the elementary level, staff use Lexia, STAR, and district-developed formative assessments for both ELA and mathematics. At the middle-school level, staff use STAR and IXL for mathematics as well as district-developed formative assessments for both ELA and mathematics.
- **Data Use.** The district has some systems for supporting data use; however, the data review procedures are neither consistent nor universal across all schools. Further, although there are some data meetings to review data at the elementary level, such as Fountas & Pinnell benchmarks, data meetings at higher grades appear to be confined to MCAS data and MCAS item review.
- **Sharing Data.** The district has some mechanisms for sharing data with families, although documents submitted to demonstrate this communication were limited to report cards. Interviewees noted that, at the time of the visit, there was no central repository of data for staff to access, although one interviewee reported an effort to integrate recently collected data into the district’s student information system.

Table 8 summarizes the key strengths and areas for growth in assessment.

Table 8. Summary of Key Strengths and Areas for Growth: Assessment Standard

Indicator	Strengths	Areas for growth
Data and assessment systems		<ul style="list-style-type: none">▪ Establish a more consistent process to ensure the effective use of data districtwide.
Data use		.
Sharing results		<ul style="list-style-type: none">▪ Develop a central data repository.

Data and Assessment Systems

Data are used throughout the district for various purposes, but the use of data in team settings to address student needs is not consistent across the district. Multiple stakeholders, including the superintendent, school leaders, and teachers, said that decisions about the use of formative assessments were typically left to the discretion of individual teachers.

In ELA, elementary grades use the EarlyBird assessment, Fountas & Pinnell, Lexia, and the FUNdations phonics assessment. STAR Math is the main mathematics assessment at the elementary level. At the middle-school level, STAR Math and IXL are used to assess mathematics progress, and the district plans to add Group Reading Assessment and Diagnostic Evaluation

assessment in the fall 2022 as the main middle grades ELA assessment. The district’s assessment inventory does not list any assessment tools for Grades 9–12. Secondary teachers described common summative and formative assessments created by school staff and used across all grades and most departments at the high school, although some interviewees said that their departments did not use common assessments.

For nonacademic needs, the district uses the Panorama survey and what one district leader called “homegrown SEL [social-emotional learning] screeners.” This same leader characterized the development and use of these tools as an ongoing area of development for the school system. In addition, interviewees at the high-school level reported that data on office referrals, suspensions, and related disciplinary data had historically been shared with staff and broken down by grade, ethnicity, and other factors, although these same staff reported that this practice was less frequent during the COVID-19 pandemic.

Data Selection. Interviews and a review of the district’s assessment inventory indicated that Needham used multiple sources of data, including state assessment data, benchmark and interim assessments, some socio-emotional/mental health screeners, AP examinations, and locally developed formative assessments to drive improvement decisions. For example, teachers reported differentiating instruction based on information from multiple assessments, including tests and project-based assessments. Instructional leaders and district leaders stated that teachers were given autonomy over which formative assessments they used, and they often used online sources such as Quizlet or Kahoot! Teachers had various responses about the type of formative assessments they used and how they used formative assessments.

Assessment Alignment. (Area for Growth) A variety of tools and resources help with the collection of data to assess students’ progress and needs in the district, but multiple stakeholders, including the superintendent, district leaders, and school leaders, reported that the administration of the data collection tools was inconsistent and not systematic. In addition, the team did not find evidence of centrally aligned guidance or process for organizing and sharing the data. The superintendent expressed his desire for the district to improve its approach and increase coherence in the expectations, administration, and analysis protocols of student assessment data. At the secondary level, the team did not find documented common academic assessments, and teachers reported not being aware of any.

Data Use

Data within the district drive instructional practice by teachers at the classroom level, but the use varies across schools and grade levels. Neither documents nor interview data suggested a consistent, collaborative activity among grade-level, department, or school teams to review student data across all schools. A document review did indicate that regular reports were produced for Fountas & Pinnell elementary literacy data. Similarly, documents also suggested that an analysis of MCAS data and items took place in 2020-2021, including presentations to stakeholders on lessons learned and discussion among grade-level teams of colleagues on actions to take based on these lessons. Relatedly, district and school leaders reported limited districtwide review of academic data aside from the state-mandated student assessments. Multiple instructional and school leaders said that academic coaches in mathematics and literacy often led data discussions with instructional

teams. When asked about the data review process, some elementary interviewees described a teacher support team process, which they likened to a response to intervention process. However, these interviewees said that this data-informed process was largely an effort to respond to individual students' needs based on referrals, not as a structure to support regular data use to inform classroom practice or provide actionable information to address achievement gaps at the classroom level. Further, stakeholders spoke of the absence of a central data repository where teachers and school leaders could review individual student needs cross time and content areas. These stakeholders told the team that this absence hindered their ability to review the needs of the whole student.

District Data Use. School and district leaders spoke about the absence of an organized, districtwide effort to review data to inform academic decision making. Several district and school leaders expressed a desire for a more organized effort, with one leader saying, "What I'd like to see happen is more districtwide use of that information, so we can track trends in a better way." A document review indicated that school staff often reviewed data together in their departments and disaggregate data for a more nuanced analysis, but multiple school leaders noted an absence of formal expectations to do this. Data review is done on a school-by-school basis, often led by academic coaches.

Support for Data Use. Multiple district and school leaders told the team that the district did not have a shared repository for data. This means that important data are not readily available to staff. School leaders and staff said that academic coaches often were the main source of support for teachers in reviewing and deciding how to use academic data.

Sharing Results

Student assessment data are shared and discussed, but the district does not have a central data repository to enable staff to access and analyze data, and develop a plan to support individuals and groups of students. Interviews with multiple instructional and school leaders and a document review indicated that most internal data-sharing opportunities involved the academic coaches working with the teachers to analyze data.

Externally, assessment results are shared at the individual and community levels. Although data collection strategies and analyses vary across the district, a districtwide expectation requires that teachers reach out to the parents/guardians of students who are struggling before a low grade appears on the student's report card. Student performance data and trends are shared with families and the community in an annual newsletter.

Communication With District Staff. (Area for Growth) Staff, including school leaders and district leaders, expressed concern that without a central data repository they did not have a way to get all the needed data to the appropriate individuals and groups. School leaders and staff in most schools reported that academic coaches worked with teachers in analyzing and planning related to student assessment data.

Communication With Families. Needham uses PowerSchool as a learning management system and shares student courses, schedules, and grades through a parent portal. Stakeholders also reported

that they connected with families through parent-teacher conferences and teacher telephone calls, noting that classroom teachers were primarily responsible for these conferences and calls. A newsletter that contains important district academic data points is delivered annually to the community.

Communication With Students. The team found limited evidence of an organized district effort to include students in data discussions. Students and families have access to PowerSchool for viewing students' grades/records, and teachers are the primary sources of grade and classroom assessment discussions with students. Interviews and a document review indicated that PowerSchool was updated at midterms and at the end of the trimester.

Recommendations

- The district should establish a more consistent process to ensure the effective use of data districtwide.
- The district should consider developing a shared data repository to ensure that staff can access student performance data and identify all students' strengths and challenges, to close achievement, access, and opportunity gaps for students of color, economically disadvantaged students, English learners, and students with disabilities.

Human Resources and Professional Development

Interviewees said and a document review confirmed that Needham had an established human resources infrastructure, including processes for recruiting, hiring, and evaluating staff. In particular, interviews and a document found the following:

- **Educator Pipeline.** The district plans for and addresses staffing need by using enrollment projections, involving both school and district leaders in the hiring process, and using diversity-oriented committees to support the diversification of applicant pools and the staff overall.
- **Evaluation and Recognition.** The district has programs in place to support new teachers and recognize outstanding teachers, including developing coaching roles, which allow more experienced teachers an opportunity to lead and newer teachers to have support.

Table 9 summarizes strengths and areas for growth for human resources and professional development.

Table 9. Summary of Key Strengths and Areas for Growth: Human Resources and Professional Development Standard

Indicator	Strengths	Areas for growth
Infrastructure		
Recruitment, hiring, and assignment	<ul style="list-style-type: none"> ▪ Needham uses enrollment projections to inform decisions, and has several recruitment strategies to diversify the applicant pools for open positions 	<ul style="list-style-type: none"> ▪ Develop a districtwide process to assign teachers based on students' needs.
Supervision, evaluation, and educator development	<ul style="list-style-type: none"> ▪ Needham offers a variety of synchronous and asynchronous learning opportunities for staff. These opportunities have clear goals and objectives relevant to student outcomes, align with local goal and priorities, promote collaboration, advance educator abilities, model strong professional practice, and are led by professionals. ▪ The district has a mentoring system which provides participants with a mentoring handbook and tools to guide them through their first year. 	<ul style="list-style-type: none"> ▪ Consistently provide constructive, growth-oriented feedback to teachers.

Recognition, leadership development, and advancement		<ul style="list-style-type: none"> ▪ Consider developing a career-ladder pipeline and a formal recognition program for educators.
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Infrastructure

Accurate Employment Records. A document review indicated that the district used PowerSchool to maintain employment records.

District Reports to Principals. Employment-related information is analyzed and provided to principals for planning and decision making. In addition, district staff and school leaders stated that principals had access to applicant pools for open positions at the school level and used that information to initiate the hiring process. The team did not find evidence that further reports were provided to school leaders for planning and decision making.

Recruitment, Hiring, and Assignment

Interviews and a document review indicated the district’s efforts to recruit diverse staff in a district whose staff school and district leaders described as “majority White and female.” Needham has a commitment to combating hiring bias and creating more opportunities for equity by diversifying its applicant pool. Evidence supports the use of student achievement data and enrollment projections in recruitment and hiring systems.

Recruitment Systems. (Strength) Interviews with district and school leaders and a review of the fiscal year 2023-2037 Preliminary Enrollment Projections document indicated the use of enrollment projections to inform staffing decision making. Evidence gathered from district and school leaders’ interviews and a document review, including recruitment documents and the Student Opportunity Act Plan, also showed that student achievement data informed staffing decision making. For example, one school leader said that the district hired at least four academic support staff to address academic setbacks caused by the COVID-19 pandemic and its impact on student learning. Multiple school and district leaders expressed their desire to recruit more staff of color and a document review indicated that they were developing strategies to hire and retain those staff. For example, one district leader said that postings for open positions incorporated inclusive language and encouraged applicants from diverse backgrounds to apply. Multiple principals echoed this statement, describing how the district’s human resources department worked with school leaders to create an inclusive hiring process that actively sought out diverse candidates. Interviews with district leaders and a document review showed that to combat hiring bias, each member of the hiring team had to complete bias training. Most school and district leaders reported that they have made considerable progress in the few years before this review in growing a more diverse staff. A review of school committee minutes and other documents included a presentation from the district’s human resources office to the school committee in September 2021, in which district staff reported four years of growth in the number of Black, Indigenous, People of Color staff in the district from 2018 to 2021. This presentation also discussed several recruitment strategies used by the district to diversify the applicant pools, including additional recruitment fairs and a training titled “Hiring for

Equity: Disrupting Bias in the Interview and Selection Process.” Interviews with school and district leaders indicated a need for more work in the coming years.

Hiring Systems. The hiring process in Needham is rigorous, with leaders conducting multiple interviews and consulting a search committee before hiring decisions are made. School leaders, district leaders, and teachers consistently reported that this process was necessary for finding candidates who would contribute positively and innovatively to the overall school community, especially with regard to the district’s commitment to equity. Hiring for Equity: Disrupting Bias in the Interview and Selection Process, a mandatory training for staff participating in the recruitment and hiring process, contains multiple questions related to equity being asked during an interview of a potential candidate, such as “How would you define success for students that our society has pushed to the margins?”

Assignment. (Area for Growth) The review team found evidence that there was not a shared understanding of the role the district played in assigning teachers. Multiple interviewees said that principals drove the staffing process in the schools, while district staff illustrated a collaborative process between the central office and the schools.

Supervision, Evaluation, and Educator Development

Interviews indicated that Needham staff have established a clear system for feedback and evaluations, but some staff expressed the opinion that those giving feedback were not adequately trained to evaluate teachers. Teachers generally agreed that feedback often was helpful and usually a collaborative process that incorporated student data and goal setting in line with the Massachusetts Standards of Effective Teaching. Needham has a strong commitment to equity in its PD and hiring systems, which is evident in support aspects such as affinity groups and PD training about UDL guidelines that support teachers in designing inclusive classroom learning environments.

Interview and document evidence showed that Needham had a strong mentoring system in place for incoming teachers that lasts beyond their first year in the district.

Supervision and Evaluation Systems. (Area for Growth) Although teachers’ association members consistently agreed that evaluator feedback was usually helpful to their professional development and typically a collaborative process, some participants expressed the opinion that some of the individuals providing feedback were not adequately trained to do so. A specific process is in place for instructor feedback, in which K–12 teachers have both a primary and secondary evaluator at the developing teacher level in the first three years, and one evaluator once a teacher enters professional status who is typically the head of the department in the teacher’s subject area. Interviews with school leaders and other school staff, and a document review of the online systems used for supervision and evaluation of staff showed that student achievement data and goal setting informed evaluations, which is in line with the Massachusetts Standards of Effective Teaching. For example, a document review indicated that educators were encouraged to complete a self-assessment indicating areas of strength and growth based on performance standards and student data.

The review of evaluation documents indicated that all educators are not developing student learning and professional practice SMART (specific, measurable, achievable, relevant, and time-bound) goals. Educators received ratings on progress toward their goals in the summative evaluations; however, 64 percent of the evaluations reviewed did not have student learning SMART goals, and 45 percent of the evaluations did not have professional practice SMART goals. In addition, educators received specific, actionable feedback approximately only 59 percent to 63 percent of the time in which the evaluator provided areas of improvement for educators or identified strengths or practices that teachers should continue.

Reviews of the 2020-2021 summative evaluations for all 42 administrative-level staff showed that twenty-six evaluations (63.4 percent) did not include submission of multiple sources of evidence to support performance on summative evaluation standards. Nine administrator evaluations (21 percent) reviewed did not include ratings on standards from an evaluator; 14 percent of the evaluations did not have student learning SMART goals or professional practice SMART goals written in any portion of the summative evaluation document; and 69.2 percent of the evaluations did not include school improvement goals

Professional Development Systems. (Strength) In the two academic years before this review, Needham offered a variety of PD opportunities for staff, including UDL, antiracist practices, and multiple sessions specific to teachers' subject area and grade-level responsibilities. Opportunities included in-person large-group sessions, book groups, virtual sessions, and self-guided learning opportunities for teachers. In relation to DESE's [Standards for Professional Development](#), a review of PD documents indicated that PD opportunities had clear goals and objectives relevant to student outcomes, were aligned with local goals and priorities, promoted collaboration, advanced educator abilities, modeled strong professional practice, and were led by professionals. These PD documents did not state what data might have informed the selection of these topics or how their effectiveness was assessed. The team found evidence of an overarching PD plan a PD plan for 2020-2021 that included topics from the student support services department, which included self-directed modules on antiracist teaching, social-emotional learning, trauma-sensitive practices, and inclusion. Interviewees reported that PD days for teachers to work in school, team, or department groups took place about twice per month, in addition to monthly department meetings. The team did not find evidence of an overarching PD plan for 2021-2022.

A document review indicated several themes in the district's PD offerings, including creating equitable and accessible learning environments for all students using frameworks such as UDL. Many school leaders and teachers said that the UDL guidelines were a large part of their PD, and a document review confirmed that PD sessions about the UDL guidelines took place throughout the district. UDL, as a framework for allowing multiple entry points for students into subject content, is aligned with the district's vision statement, the PONG.

Other districtwide examples of PD targeting systemic inequity included "Indigenous People and the Euro-American Colonialization of North America" and "Restorative Practices Training."

In addition, multiple teachers and school leaders spoke about PD opportunities that focused on instruction and a document review confirmed that; for example, the improvement plans of one school listed explicit goals to have English staff "participate in training on special education and

literacy.” Similarly, interviewees described school-and department-based learning opportunities related to project-based learning, technology, and alternatives to traditional assessments.

Overall, interviews indicated that PD offered to Needham educators is varied and relevant to their work. One group of teachers, for example, described an opportunity to connect with experts in their subject area, noting that they were pleased with this opportunity and expressing a desire to do more learning like this. Others noted opportunities for professional growth both individually (such as asynchronous learning or tuition reimbursement) as well as with colleagues that were relevant to their daily practice.

Induction and Mentoring Systems. (Strength) Interviews with school leaders and teachers and a document review indicated that the district’s mentoring system benefitted all staff. Needham has a mentoring handbook, designed by a committee of stakeholders, that describes the role of a mentor, including the training and duties of mentors. The handbook provides mentors a checklist, a meeting log, a needs assessment, a rubric, and other tools. School and district leaders described the structure for first-year teacher mentoring, in which a more experienced teacher was trained and paired with newly hired teachers to help guide them through their first year. The Needham Mentoring Program Handbook clearly lays out the roles and requirements of a mentor, including “meeting regularly with your mentee throughout the school year” and “completing an action plan.” Mentors said that they learned about what was expected of a mentor, and teachers reported that they benefitted professionally from this system. Examples of frequently mentioned mentoring supports included townwide staff affinity groups, including groups for LGBTQ+ staff and the MALANA (Multi-Race, Asian, Latinx, Native American) group for staff of color. District and school leaders stated that they hoped to continue the mentoring process beyond staff members’ first year.

Recognition, Leadership Development, and Advancement

The Needham Professional Growth Handbook clearly articulates the process by which staff should engage in requesting a salary lane change. The team did not find evidence of an articulated professional career ladder or plan to build leadership skills among teachers. Teachers said that they had leadership opportunities as department heads, noting that other leadership opportunities were limited. Although teachers, responding to a district-administered Panorama Survey, agreed that their school supported them growing as classroom teachers, in interviews teachers suggested that this support was limited to their current roles and did not provide a pathway or articulated ladder to school leadership.

Recommendations

- The district should work to communicate the districtwide process for assigning teachers that exists based on students’ needs.
- The district should leverage its educator evaluation system to strengthen instruction by consistently providing constructive, growth-related feedback to teachers.

- The district should consider developing a career-ladder pipeline and a formal recognition program that offers educators a pathway to advancement and the district an opportunity to recognize and retain educators, developing leaders in the process.

Student Support

Needham has many student support structures in place to assess issues related to school climate and provide support based on students' academic and nonacademic needs. In addition, Needham continuously assesses students' needs and has emerging supports based on newly identified students' needs. Stakeholders described and a document review confirmed that Needham had dedicated staff and established systems for monitoring school climate, providing proactive tiered supports for students' academic and social-emotional needs, and communicating with families. The following are key findings from the review:

- **School Climate.** The district makes sure that schools are safe and supportive by working to create what participants called a “supportive” community that is also “reflective and thoughtful.” Reviewed documents described supports for student safety and well-being, including a district mental health team being developed during the 2021-2022 school year for implementation in 2022-2023, as well as comprehensive training on discipline practices.
- **Tiered Supports.** The district offers the following range of additional academic and nonacademic supports: emerging tiered systems of support structures, including student support teams in schools; newly selected social-emotional screening tools; and roadmaps for the full implementation of tiered supports.
- **Family Engagement.** Collaborative relationships with parents and families include a special education parent advising committee of parents of children with special needs and a parent group for families of English learners. The district makes efforts to diversify those groups and hold meetings at times and in formats to maximize the number of families who can attend.

Table 10 summarizes the key strengths and areas for growth for student support.

Table 10. Summary of Key Strengths and Areas for Growth: Student Support Standard

Indicator	Strengths	Areas for growth
Safe and supportive school climate and culture	<ul style="list-style-type: none"> ▪ Provides professional development for instructional leaders to develop culturally conscious and trauma-sensitive classrooms. 	<ul style="list-style-type: none"> ▪ Continue work to ensure that all school and classroom environments are supportive, culturally responsive, welcoming, trauma sensitive, gender- and sexuality inclusive, reflective of the community and of students’ cultures and identities.
Tiered systems of support	<ul style="list-style-type: none"> • The district provides professional development for instructional leaders to develop culturally conscious and trauma-sensitive classrooms. 	<ul style="list-style-type: none"> • Implement tiered, evidence-based, culturally responsive systems of supports for students. • Provide high-quality, ongoing support and professional development to support the use of tiered models, and to build expertise in academic, behavioral, and social-emotional learning.
Family, student, and community engagement and partnerships		

Safe and Supportive School Climate and Culture

Overall, Needham has systems in place that prioritize the physical, intellectual, and emotional safety of all students and adults, and staff create an environment that helps students develop social, emotional, and academic knowledge, skills, and competencies and processes for refining these based on needs.

Safe and Supportive Environment. (Strength and Area for Growth) Needham prioritizes the safety and well-being of all students. The 2020-2021 Views of Climate and Learning student survey data, administered to Grades 4, 5, 8, and 10, indicates a relatively strong school climate across the district. Stakeholders pointed to advisories as a key strategy for fostering community among students and teachers, developing positive behavior, and building social and emotional competence in students. One instructional staff member described advisory at High Rock Middle School as useful because this school “[pulls] five elementary schools into one building for one year and the goal is to create this overarching community. So, [they] start with the advisory program that helps kids.” The district also has emerging strategies focused on ensuring that the environment reflects students’ cultures and identities. For example, the librarians recently received a grant to improve diversity in race, culture, and perspectives in the library’s collection of books. In addition, the district website highlights a new K–5

racial literacy curriculum in Needham elementary schools that the district plans to introduce at the middle- and high-school levels.

Despite these examples of cultural appreciation, students, families, and teachers suggested that culturally responsive teaching in classrooms remained an area in need of growth. In a series of focus groups, students reported not feeling “seen” in their classrooms, and teachers described needing more strategies to integrate students’ identities into their respective disciplines. The district has started offering support to teachers to address this need through new curriculum and professional development (see Access, Equity, Engagement, and Student Voice section). Consistent with these statements, instructional observation scores from middle- and high-school observations in the middle range for the Positive Climate dimension suggest that some teachers and students share warm and supportive relationships, but such relationships are not consistent across classrooms and schools. Similarly, scores from middle- and high-school observations in the middle range for the Teacher Sensitivity dimension suggest that secondary school teachers are only sometimes aware of student needs. Another area for growth is the amount of social-emotional support the district provides to students. Both parents and instructional staff expressed a need for more student mental health supports since the pandemic. A review of school committee meeting minutes indicated that district leaders planned to address this need by requesting more funds for mental health services in the fiscal year 2022-2023 budget.

Access, Equity, Engagement, and Student Voice. Interviews and a document review indicated that Needham demonstrated a commitment to developing staff capacity to examine and dismantle implicit biases and systemic inequalities. With the introduction of the new racial literacy curriculum in the district’s elementary schools, school leaders and teachers reported participating in antiracist PD to teach the curriculum. In addition to PD, equity resources are available to all Needham educators on the district website, and racial literacy resources are on the [NPS Teaching and Learning Hub](#). The Race, Access, Equity, Leadership Coalition “provides leadership and guidance on eliminating barriers to racial equity and supporting the advancement of all learners in the Needham Public Schools.” The coalition’s members include district leaders, as well as teachers, families, and student representatives. In addition, Needham promotes student voice and leadership. School committee members welcome student voices into their decision-making process through policy and practice. A high-school student serves on the committee as a member, a position that rotates regularly. The school committee collects reports periodically from the student advisory council at the high school and the middle school. Teachers and school leaders said that in addition to serving on councils students across the district are regularly encouraged to provide feedback to teachers and administrators through surveys, such as the MetroWest Survey and other school-level questionnaires.

Positive Behavioral Approaches. Interviews and a document review showed that Needham implemented clear schoolwide positive behavioral expectations. All schools have student and family handbooks that detail expectations for attendance and conduct, including guiding principles for each level (i.e., elementary, middle, and high schools). Staff from all levels reported that expectations were communicated clearly to students and families. Approaches to managing behavior and addressing underlying causes vary by level, but some staff at all levels reported positive approaches to reinforce behavior expectations. The handbooks illustrate these expectations; for example, s one

elementary-school handbook contains descriptions of adult assistance, peer communication, and parent conferences. At the elementary level, interviewees gave various descriptions of a formal system of positive behavioral intervention and support that included defined expectations and a system for tracking data on behaviors. Some staff said that these expectations were present at their schools and others were unsure. At the middle-school level, interviewees described posted expectations and an advisory period for discussing reminders. At the high-school level, interviewees described consistent communication of expectations to the whole school community, including “restorative” approaches. One participant noted, “I would say they always approach every situation not from a punishment standpoint, but more like, ‘Hey, what’s going on and how can I help you meet this standard?’” Some high-school students, however, said that the district did not take appropriate measures and provide sufficient schoolwide communications in cases of hate speech or racist graffiti.

Teachers and students described cultural expectations present in their schools. At the elementary level, interviewees said that they were “be kind, be curious, be responsible, and be safe.” At the middle-school level, interviewees said that the cultural expectations were “be present, be here, be respectful, be kind, [and] be honest.” Consistent with these statements, instructional observation scores in the high range for the Behavior Management dimension of the CLASS tool at both the elementary- and high-school levels suggest that rules and guidelines for behavior are clear and consistently reinforced by teachers. At the middle-school level, scores in the middle range suggest that rules and guidelines may be stated but are not always consistently enforced. Consistent with the middle-school scores, the evidence from interviews and focus groups is mixed about the perceived effectiveness of the behavior management systems and specifically identified the consistency of implementation as a key challenge. For example, some students described an absence of disciplinary action when racially motivated incidents took place. Staff and students stated that administrators responded to such incidents by reinforcing behavioral expectations rather than considering what consequences were appropriate. Although some students and school staff reported needing more consequences, other district staff members said that the absence of negative consequences was part of the strategy to reinforce positive behavior—thus, integral to a shift the district is trying to make. One school leader said, “There’s a more SEL [social-emotional learning] approach to behaviors than there had been . . . Now when you’re looking at the cause of the behaviors, rather than just the behaviors themselves . . . [school staff are] not asking the question about what do we need to punish this? And we have to ask the question, ‘Where is this coming from?’” These school-level stakeholders’ mixed sentiments reflect a need for more staff support and communication about how students’ misbehavior has been handled and the shift to a new way of addressing students’ behavior and expectations.

Tiered Systems of Support

Tiered systems of support are emerging in Needham but are implemented inconsistently throughout the district. For instance, Tier 1 supports are available across Needham, and there is evidence for the use of Tier 3 supports. The team did not find evidence of Tier 2 supports in the schools. Districtwide stakeholders collaborate to provide alternative support structures for students. Overall areas of improvement include intervention and progress monitoring, as well as synchronized Tier 2 implementation.

Provides Tiered, Evidence-Based, Culturally Responsive Supports for Students. (Area for Growth)

The superintendent told the team that a multi-tiered system of support (MTSS) is a work in progress. Interviews and a review of documents indicated that the district had broadly defined a number of goals related to tiered systems of support, but the implementation of these principles was still in process and not consistent across schools.

District documentation of the MTSS process includes a “flowchart” of tiered supports, referring staff to their documented curriculum (see Curriculum and Instruction). For social-emotional Tier 1 supports, student advisory clusters promote student and adult relationships and a sense of belonging, and counselors are available to all students. The district’s flowchart defines Tier 2 supports as being “in addition to” Tier 1 supports and “generally done in small groups.” A related document, describing a tiered system of support for literacy, also defines quality curriculum as Tier 1 in literacy and further prescribes “supplemental interventions” such as “30 minutes daily instruction” as key Tier 2 literacy supports. District documents describe Tier 3 supports as “intensive” and individualized, and Tier 3 in literacy includes examples of very small groups, individual supports, such as “60 minutes of daily intensive instruction.” These documents specify that Tier 1 and Tier 2 actions should be taken before a student is referred to an individualized team-based process.

At the school level, interviewees generally described opportunities for students to receive support during the school day but described Tier 1 and Tier 3 supports more clearly than Tier 2 supports. At the elementary-school level, teachers spoke of What I Need (WIN) time for students to get additional support and enrichment. Interviewees described a twice weekly “X” block at the high-school level, a more flexible time period where students could seek support. Interviewees said that although these schedule structures were in place, the process across elementary schools was inconsistent. A number of elementary-level interviewees noted that their teacher support team (TST) was part of the tiered systems process, without describing how Tier 2 interventions were first attempted at the classroom level. One elementary-level interviewee said that the school’s TST process “kind of fell off during COVID,” whereas another elementary-level interviewees described the TST process as a part of Tier 2. Stakeholders said and a review of t guidance documents indicated that the referral process included a school-based student support team that reviewed referred students identified for potential supports, assigned students to support, and then monitored students’ progress every six to eight weeks. Elementary interviewees described a process for convening, teams, looking at data to make group assignments, and revisiting these placements. Middle-school interviewees reported having collaborative meetings with representative stakeholders to discuss students’ needs,. Interviewees at multiple levels described Tier 2 supports, such as small groups with the literacy specialist at the elementary level and the opportunity for high-school students to visit specialized centers in writing and mathematics for additional supports during their X block. A review of the district’s MTSS self-assessment indicated that Tier 2 and Tier 3 supports were not in place formally at all levels in the district.

A Systemic Planning Process With Representative Stakeholders having Authority to Make Collaborative Decisions. Interviews showed that the district had defined a process for schools to convene stakeholders, assess student needs, and assign supports. As noted in the preceding sections, several documents defined this process at the district level for a general approach to tiered

interventions as well as roadmaps for mathematics and literacy. The roadmap documents describe time frames for assessment and reassessment of needs. Additional documents outline a plan for engaging teachers, caregivers/guardians, and other key staff to attend meetings for reviewing data, identifying needs, and pursuing plans. From this meeting, a support plan and monitoring timeline are detailed and refined based on students' progress. A team composed of student support team members, the principal, special education specialists, and interventionists often is the group meeting to make decisions about evolving students' needs, new students presenting needs, and students' progress. District-defined structures can vary from school to school in their use of data, assignment of interventions, or consistency in meeting. For example, elementary interviewees said that some schools had regular TST meetings in 2020-2021 whereas other schools did not have meetings.

Scientifically Validated Assessments for Screening, Diagnostic, and Progress Monitoring.

Needham has a strong culture of using assessments for screening and diagnosing students but has limited assessments and diagnostics for progress monitoring. Teachers and school leaders reported that Needham administered literacy and behavior screeners such as EarlyBird, Screening, Brief Intervention, and Referral to Treatment and the MetroWest Health Survey in varying grade levels. In addition to MCAS scores, Needham's assessment inventory for 2020-2021 states that elementary and middle schools use the STAR assessment, the Fountas & Pinnell benchmark assessment, and diagnostic tests for students who need more support but do not qualify for Section 504 or Individualized Education Programs (IEPs). District leaders described a need for more uniform progress monitoring tools and noted that this absence of uniform progress monitoring tools was one reason for limited implementation of targeted (Tier 2) and intensive (Tier 3) interventions. The superintendent stated that some schools implemented consistent progress monitoring strategies, whereas others did not. For instance, some elementary teachers administer assessments more than the standard of two times a year for identified students and receive PD to improve student progress monitoring through intervention tools. However, the team did not find evidence of this happening at the middle- and high-school levels.

School Leadership Teams. (Area for Growth) Interviews and a review of leadership team meeting minutes and the district's MTSS assessment indicated limited evidence that Needham's school leadership teams evaluated the effectiveness of intervention within its tiered systems of support. Although interviewees highlighted the school-based instructional teams as an avenue for assessing intervention effectiveness, at the time of this review most district efforts had only identified students' needs and developed interventions to support these needs.

High-Quality, Ongoing Support and Professional Development for Tiered Models Build Expertise in Academic, Behavioral, and Social-Emotional Learning. (Strength and Area for Growth)

Interviews indicated that Needham provided PD to build expertise in tiered models and learning. Teachers described PD for instructional leaders to develop culturally conscious and trauma-sensitive classrooms. For instance, Pollard Middle School staff completed the Pollard Staff Takes Small Steps Toward Equity Training and shared practices and plans for creating equitable classroom environments. In another example, stakeholders reported receiving training to facilitate LGBTQ+ inclusive instruction and emotional supports after staff noticed

an increase of LGBTQ+ students with IEPs for emotional needs. Teachers receive ongoing support through regular meetings with other teachers, department heads, interventionists, and instructional coaches to improve the instructional experience for students.

Family, Student, and Community Engagement and Partnerships

Needham has strong collaborative relationships with families, students, and community partners to support students' academic progress and behavioral, social, emotional, and physical development and well-being. Family members were crucial contributors to the development of the district's strategic plan. The district sends out routine communications vis-a-vis schools to families and has set expectations for classroom teachers to contact families in support of students' well-being and academic progress. The district engages with community partners to provide students and their families with support beyond school-based needs.

Family and Student Engagement. Stakeholders said that in Needham families were valuable members of the school community, and family engagement was encouraged in multiple dimensions of school operations. The superintendent said that Needham's vision statement (PONG) was developed in partnership with parents who served on a planning committee alongside 40 other stakeholders. The superintendent recruited and engaged students and families of color to work on this effort to ensure a diversity of perspectives in the planning process. Before finalization, the plan was presented to families to obtain additional feedback. Parents in the family member focus group reported being generally satisfied with district communication across a number of channels, noting that communication from the district and schools was accessible through various means, including emails, newsletters, social media, or in-person events. School websites have language translation features, making information accessible for families. Review of The Needham MTSS self-assessment indicated that the district involved families and caregivers in student support processes and decision making. Some families reported variation in communication across schools in the district, with one interviewee reporting significantly less communication from schools at the middle and secondary levels and another noting dissatisfaction with communication from their child's elementary school.

Community Engagement. Needham schools connect with community members and organizations to provide in-school and out-of-school support for students and families. To engage the community at large, Needham has two main strategies: (a) distributing annual performance reports to community members to communicate the district's key priorities and (b) conducting annual open houses, hosted by the school committee, to obtain community feedback. For targeted needs, the district and schools engage community partners, such as Riverside Community Care, which provides wraparound care coordination. Interviewees described a monthly youth resource network meeting, where school staff and staff from Needham Youth and Family Services came together to discuss families' needs and provide supports. Instructional staff identified other community partnerships with state agencies that support youth employment or summer extended school year programs for high-needs students.

However, the team found limited information about the systems or strategies used to develop and manage partnerships between schools and community organizations, suggesting that partnerships may be developed for students in need, but that there may not be a sufficiently systematic process for identifying those needs.

Recommendations

- The district should ensure that all school and classroom environments are supportive, culturally responsive, welcoming, trauma sensitive, gender- and sexuality inclusive, reflective of the community and of students' cultures and identities.
- The district should implement across the district tiered, evidence-based, culturally responsive systems of supports for students.
- The district should provide high-quality, ongoing support and professional development to support the use of tiered models, and to build expertise in academic, behavioral, and social-emotional learning.

Financial and Asset Management

In Needham, interviews and a review of financial documents indicated that financial management was well documented, adequate resources were provided, and tracking and audit systems were in place. In addition, interviewees described an annual capital planning process that at the time of this review resulted in a number of capital plans under consideration. In particular, interviews and a review of key budget documents indicated the following:

Adequate Budget. The district has an annual operating budget of \$80,943,823 (fiscal year 2021 figures, not including state and federal grants and other additional funds).

- **Tracking.** The district has a business office, with the assistant superintendent for finance and operations, an assistant director of financial operations, a business and operations coordinator, and four accountants/accounting specialists.
- **Capital Planning/Maintenance.** At the time of this review, the district had tentative plans to renovate or replace several district buildings. However, a definitive agreement between the district and town was not in place, a firm timeline was not in place for a vote on the long-term capital plan to go before town meeting or for a capital override to voters.

In general, interviewees reported strong relationships among district leaders, including the school committee, and members of town government with regard to fiscal and capital management and planning. Table 11 summarizes the key strengths and areas for growth for financial and asset management.

Table 11. Summary of Key Strengths and Areas for Growth: Financial and Asset Management Standard

Indicator	Strengths	Areas for growth
Budget documentation and reporting		
Adequate budget		<ul style="list-style-type: none"> ▪ Carefully consider how current resource allocation directly supports strategic improvement and what reallocations may be needed.
Financial tracking, forecasting, controls, and audits	<ul style="list-style-type: none"> ▪ Reports are provided regularly to the superintendent and the school committee; these reports are publicly available online. 	
Capital planning and facility maintenance	<ul style="list-style-type: none"> ▪ District leaders and staff are discussing a long-term plan to address capital development and improvement needs. 	

Budget Documentation and Reporting

Needham maintains clear and accurate budget documents that include information about all sources of funds and the allocation of resources. The current and upcoming fiscal year district budget is available for the public on the district website.

Budget Documents. Needham’s comprehensive budget documents include clear, accurate, and pertinent information to help guide spending in the district. The superintendent’s budget request document is organized by sectors of spending, with additional information provided about department staffing, critical issues, department investment in equity and the PONG vision, activities in support of equity and the PONG vision, and funding recommendations. Budget documents also include historical spending data from fiscal year 2019 to 2022 for comparison. In the operating summary, budget expenditures are broken down by line item category, program area/department, functional area, and school levels. The budget also includes line item details for each budget, including expenses by school and staffing. Operating budget changes are well documented. Budget documents on revolving funds from transportation to nutrition services also are included.

A school committee presentation related to the PONG vision statement has been integrated into all sectors of the district’s budget, along with priority investments for supporting this vision. Budget documents include student enrollment data and projections into future years. A review of school committee meeting minutes indicated that that student performance data drove budget priorities.

Municipal Agreement. Interviewees, including central office staff and school committee members, as well as the town manager, reported long-standing and positive working relationships among their respective school and town offices. Interviewees said that a “working relationship” between the district and the town served in place of certain formal agreements. District, school, and town leaders described the agreement process as a lengthy one that involved multiple stakeholders (e.g., town meeting, select board, or finance committee), and one where both entities needed to come to consensus about annual budgets. School central office interviewees said that town members were thorough in asking for data and explanations behind costs and budget requests, and district and town leaders agreed that they were most often mutually satisfied with these agreements. For example, district leaders said that the district initially handled maintenance and facilities, which evolved to be jointly managed by the district and the town. At the time of this review, is the town managed maintenance and facilities. The team did not find evidence of specific, written agreements for providing custodial or facilities management, but did find evidence of agreements related to services that school resource officers, who are police department employees, provided to the district.

Adequate Budget

The evidence about budgeting in relation to spending on curricula, is consistent across groups; however, reports on the adequacy of staffing and resource allocation were mixed. According to DESE data for fiscal year 2020, the district budget exceeds net school spending requirements, with spending 72 percent greater than that mark. For that same fiscal year 2020, the district’s in-district per-pupil expenditure was \$18,165; this per-pupil figure exceeds the state’s median in-district per-pupil expenditure. Although district leaders and a document review indicated that an adequate

budget supported the district's needs, school leaders, teacher specialists, and high-school students reported resource inequities evidenced by staffing shortages and some fee-based programs.

Provision and Use of Resources. (Area for Growth) Multiple teachers described ways in which school staff requested additional funding. School leaders can make budget requests for resources that support or enhance curriculum on the condition that they demonstrate how a request aligns with the district's strategic plan and how it will affect student growth. Yet, teachers reported mixed opinions about whether staffing is adequate. For example, some teachers reported that they "run slim" in terms of staffing and must "get creative" in ways that they can support students with special needs. Others, however, reported that they have been fortunate with the way their special education positions has been staffed in their schools.

Another resource inadequacy reported by school-level stakeholders is the absence of "late" busing options that enable students to stay after regular school hours for academic support, athletics, clubs, and other extracurricular activities. The absence of enough late buses creates access issues for students. Teachers said that the district used to have a late bus that ran a half hour after school let out, but even this was not enough to support all students who needed or wanted to stay after school. Several district and school leaders discussed access to fee-based programs as another budget-related equity issue in the district. Both district leaders and school-level stakeholders said that they recognized that attaching fees to programs, without adequate resources to support scholarship opportunities, prevented some students from participating in certain activities. Overall, although a review of budget documents indicated adequate provision and use of resources, stakeholders consistently reported this as an area for growth, particularly in terms of equitable use of resources.

Financial Tracking, Forecasting, Controls, and Audits

The institutional knowledge that district staff hold in financial and asset management is a strength. The finance department provides regular and accurate reports to the superintendent and the school committee about spending, financial forecasts, and internal and external audits.

Business Office. (Strength) District leaders said that reports were provided regularly to school committee members through quarterly financial reporting and an end-of-year report. These quarterly reports are publicly available online and are discussed by the school committee. These reports include all the school-related accounts, including fiduciary and proprietary fund types. The reports include financial projections through the end of the year, with forecasts for the end-of-year financials.

Interviews with district leaders and a review of school committee meeting minutes and publicly available audit documents indicated that audits took place regularly and were provided to the superintendent and school committee in a timely manner. A district leader reported that the school department undergoes four separate independent audits annually, including an audit of Town finances, of federal receipts, of its end-of-year report, and of student account activities. Interviews with district leaders and a review of documents and the town's website indicated that financial reports were available to the public on the town's website in two areas: the business office and the school committee sections.

Capital Planning and Facility Maintenance

Needham has a townwide plan (from 2014) that guides its preventive maintenance and capital planning needs; at the time of the district review, the plan was being updated. The district has several buildings that require extensive maintenance, which has the potential to put a strain on the district's capital assets. The district places value on ensuring that educational and program facilities are accessible, clean, safe, secure, well lit, well maintained, and conducive to student learning, and it has a long-term capital plan to address improvement needs. Foresight and responsive planning have proven to be a strength of the district, although balancing multiple competing projects could be a challenge moving forward.

Preventive Maintenance. District leaders and town officials noted that the town took primary responsibility for maintenance. Interviews with district leaders and a review of the 2014 townwide plan indicated that Needham focused on some areas of preventive maintenance but still has some needs. Interviews with district leaders indicated that some facilities needed capital improvements and building use needed to be considered in line with recent studies of enrollment projections. The town plan described schools with science classrooms not having the equipment that should exist within a science facility, having an undersized auditorium, and plumbing improvement needs. Furthermore, modular classrooms do not meet current instructional modes. Interviewees spoke of an increasing demand for preschool programming, noting that this would require a facility needs review. Multiple stakeholders reported ongoing discussions around a long-term capital plan that they hoped would soon be finalized to address maintenance needs and to update the townwide master plan drafted in 2014.

Long-Term Capital Plan. (Strength) District leaders said that the long-term capital plan to address capital development and improvement needs was in the planning phase to address the short- and long-term impact on the district's capital assets. Enrollment projections, informed by an enrollment study completed by an outside agency, indicated a relatively stable student population that would likely be slow to grow. Also informing the planning discussion is the desire of some local constituents for full-day preschool. District leaders said that given the age of some facilities and changing needs, several projects were under discussion, including urgent projects, and it has been difficult to prioritize them. District leaders told the team that district staff have met with an architecture firm to create a prioritized plan to address the district's needs. At the time of the visit, multiple district leaders reported that discussions of a long-term capital plan had taken place and were in advanced stages but had not been finalized for voting by stakeholders. District leaders said that processes were in place to include input from all appropriate stakeholders, including sharing information and gathering input at committee meetings. Several stakeholders cited advanced discussion about a capital plan and capital needs, noting that an October 2021 special town meeting had approved funding for design and engineering services for at least one school.

Recommendations

- The district should carefully consider how current resource allocation directly supports strategic improvement and what reallocations may be needed.

Appendix A. Summary of Site Visit Activities

The AIR team completed the following activities as part of the district review activities in Needham. The team conducted 77 classroom observations the week of January 24, 2022 and held interviews and focus groups between January 25 and 27, 2022. The site visit team conducted interviews and focus groups with the following representatives from the school and the district:

- Superintendent
- Other district leaders
- School committee members
- Teachers' association representatives
- Principals
- Teachers
- Support specialists
- Parents
- Students

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. Needham Public Schools: 2021-2022 Student Enrollment by Race/Ethnicity

Student	District	Percentage of Total	State	Percentage of Total
All	5,515	100.0%	911,529	100.0%
African American	171	3.1%	84,970	9.3%
Asian	596	10.8%	65,813	7.2%
Hispanic	362	6.6%	210,747	23.1%
Native American	3	0.1%	2,060	0.2%
White	4,059	73.6%	507,992	55.7%
Native Hawaiian	5	0.1%	788	0.1%
Multiracial, Non-Hispanic	319	5.8%	39,159	4.3%

Note: As of October 1, 2021

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

Student	District			State		
	N	Percentage of high needs	Percentage of district	N	Percentage of high needs	Percentage of state
All high-need students	1,532	100.0%	27.4%	512,242	100.0%	55.6%
Students with disabilities	1,002	65.4%	17.9%	174,505	34.1%	18.9%
Low income ^a	465	30.4%	8.4%	399,140	77.9%	43.8%
EL and former EL	177	11.6%	3.2%	100,231	19.6%	11.0%

Note. As of October 1, 2021. District and state numbers and percentages for students with disabilities and high-need students are calculated and include students in out-of-district placements. Total district enrollment, including students in out-of-district placement, is 5,585; total state enrollment, including students in out-of-district placement, is 920,971.

^a Economically disadvantaged (2015 to 2021): Calculated based on a student's participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program; Transitional Assistance for Families with Dependent Children; the Department of Children and Families' foster care program; and MassHealth (Medicaid). (Source: See Understanding the Economically Disadvantaged Indicator). Low income (2022 to present): Calculated based on a student's participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program; Transitional Assistance for Families with Dependent Children; the Department of Children and Families' foster care program; expanded MassHealth (Medicaid) up to 185 percent of the federal poverty level, as well as students identified by districts as homeless and students the district confirmed had met the low-income criteria through the supplemental process and collected the required supporting documentation (SIMS DOE056).

Table B3. Needham Public Schools: Chronic Absence^a Rates by Student Group, 2018-2021

Group	2018	2019	2020	2021	4-yr change	State (2021)
All	5.7	5.4	6.5	4.0	-1.7	17.7
African American/Black	16.0	13.4	16.6	15.8	-0.2	24.1
Asian	3.5	5.7	6.1	1.5	-2.0	7.2
Hispanic/Latino	10.4	8.7	9.9	13.5	3.1	29.0
Multiracial, non-Hisp./Lat.	7.0	7.0	4.7	3.2	-3.8	18.9
White	5.1	4.7	6.0	3.1	-2.0	13.2
High needs	12.2	12.0	12.8	10.9	-1.3	26.3
Economically disadvantaged	17.8	18.3	18.2	21.8	4.0	30.2
ELs	13.0	14.5	15.1	11.9	-1.1	29.0
Students with disabilities	12.0	11.9	12.5	10.9	-1.1	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: Needham Public Schools,
Expenditures, Chapter 70 State Aid, and Net School Spending Fiscal Years 2019–2021**

	FY19		FY20		FY21	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From local appropriations for schools:						
By school committee	\$68,350,083	\$71,513,669	\$71,105,943	\$76,143,055	\$81,321,664	\$79,417,812
By municipality	\$37,355,861	\$52,179,229	\$47,559,009	\$47,365,192	\$42,302,254	\$43,477,554
Total from local appropriations	\$107,705,944	\$123,692,898	\$118,664,951	\$123,508,247	\$123,623,918	\$122,895,366
From revolving funds and grants	---	\$12,075,410	---	\$9,346,476	---	\$10,219,191
Total expenditures	---	\$135,768,308	---	\$132,854,723	---	\$133,114,557
Chapter 70 aid to education program						
Chapter 70 state aid*	---	\$9,876,152	---	\$10,451,715	---	\$11,025,783
Required local contribution	---	\$46,559,002	---	\$49,247,329	---	\$51,978,693
Required net school spending**	---	\$56,435,154	---	\$59,699,044	---	\$63,004,476
Actual net school spending	---	\$96,257,749	---	\$102,225,616	---	\$0
Over/under required (\$)	---	\$39,822,595	---	\$42,526,572	---	-\$63,004,476
Over/under required (%)	---	70.6%	---	71.2%	---	-100.0%

*Chapter 70 state aid funds are deposited in the local general fund and spent as local appropriations.

**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.

Sources: 9, FY20 District End-of-Year Reports, Chapter 70 Program information on DESE website

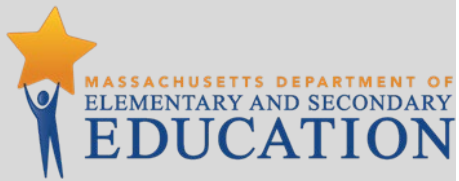
Data retrieved 5-9--22

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

Expenditure category	2019	2020	2021
Administration	\$839.65	\$813.01	\$861.41
Instructional leadership (district and school)	\$1,375.00	\$1,532.56	\$1,658.25
Teachers	\$6,744.19	\$6,852.43	\$7,482.15
Other teaching services	\$1,530.64	\$1,673.49	\$1,954.58
Professional development	\$261.63	\$258.14	\$254.83
Instructional materials, equipment and technology	\$635.99	\$662.98	\$822.39
Guidance, counseling and testing services	\$607.28	\$651.60	\$701.69
Pupil services	\$1,255.87	\$1,148.83	\$1,262.71
Operations and maintenance	\$1,550.39	\$1,317.65	\$1,694.99
Insurance, retirement and other fixed costs	\$3,082.14	\$3,254.28	\$3,593.77
Total expenditures per in-district pupil	\$17,882.77	\$18,164.97	\$20,286.77

Note. Any discrepancy between expenditures and total is because of rounding. Data are from [Per-pupil expenditure reports on DESE website](#).

Appendix C. Districtwide Instructional Observation Report



Needham Public Schools

Classroom Visits: Summary of Findings

Districtwide Instructional Observation Report

December 2021



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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 Needham Public Schools during the week of January 24, 2022. The observers conducted 77 observations in a sample of classrooms across eight 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. There are three levels of CLASS Manuals: K-3, Upper Elementary, and Secondary. The K-3 tool is used to observe grades K-3, the Upper Elementary tool is used to observe grades 4-5, and the Secondary tool is 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
<ul style="list-style-type: none">Positive ClimateNegative ClimateTeacher SensitivityRegard for Student Perspectives	<ul style="list-style-type: none">Behavior ManagementProductivityInstructional Learning Formats	<ul style="list-style-type: none">Concept DevelopmentQuality of FeedbackLanguage 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
<ul style="list-style-type: none">Positive ClimateTeacher SensitivityRegard for Student Perspectives	<ul style="list-style-type: none">Behavior ManagementProductivityNegative Climate	<ul style="list-style-type: none">Instructional Learning FormatsContent UnderstandingAnalysis and InquiryQuality of FeedbackInstructional 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*: 5.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	0	0	0	1	6	16	8	31	6.0
Grades 6-8	0	0	0	7	8	9	0	24	5.1
Grades 9-12	0	1	4	3	6	5	3	22	4.9

*The district average is an average of the observation scores. In Table 3, the district average is computed as: $([2 \times 1] + [3 \times 4] + [4 \times 11] + [5 \times 20] + [6 \times 30] + [7 \times 11]) \div 77 \text{ observations} = 5.4$

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*: 5.6

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	0	0	0	1	6	14	10	31	6.1
Grades 6-8	0	0	0	2	13	8	1	24	5.3
Grades 9-12	0	0	1	5	6	9	1	22	5.2

*The district average is an average of the observation scores. In Table 4, the district average is computed as: $([3 \times 1] + [4 \times 8] + [5 \times 25] + [6 \times 31] + [7 \times 12]) \div 77 \text{ observations} = 5.6$

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*: 3.8

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	1	1	8	7	8	6	0	31	4.2
Grades 6-8	1	3	10	8	2	0	0	24	3.3
Grades 9-12	1	2	9	3	6	1	0	22	3.6

*The district average is an average of the observation scores. In Table 5, the district average is computed as: $([1 \times 3] + [2 \times 6] + [3 \times 27] + [4 \times 18] + [5 \times 16] + [6 \times 7]) \div 77 \text{ observations} = 3.8$

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.⁷

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

Negative Climate District Average*: 6.8

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	0	0	1	0	1	2	27	31	6.7
Grades 6-8	0	0	0	0	0	3	21	24	6.9
Grades 9-12	0	0	0	0	0	3	19	22	6.9

*The district average is an average of the observation scores. In Table 6, the district average is computed as: $([3 \times 1] + [5 \times 1] + [6 \times 8] + [7 \times 67]) \div 77 \text{ observations} = 6.8$

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.

⁷ 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*: 6.3

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	0	0	0	0	1	14	16	31	6.5
Grades 6-8	0	1	0	3	2	10	8	24	5.8
Grades 9-12	0	0	0	0	2	5	15	22	6.6

*The district average is an average of the observation scores. In Table 7, the district average is computed as: $([2 \times 1] + [4 \times 3] + [5 \times 5] + [6 \times 29] + [7 \times 39]) \div 77 \text{ observations} = 6.3$

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		
Grades K-5	1	0	0	0	5	8	17	31	6.2
Grades 6-8	0	0	0	3	3	10	8	24	6.0
Grades 9-12	0	0	1	0	3	6	12	22	6.3

*The district average is an average of the observation scores. In Table 8, the district average is computed as: $([1 \times 1] + [3 \times 1] + [4 \times 3] + [5 \times 11] + [6 \times 24] + [7 \times 37]) \div 77 \text{ observations} = 6.2$

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		
Grades K-5	0	0	0	1	18	11	1	31	5.4
Grades 6-8	0	0	2	3	13	6	0	24	5.0
Grades 9-12	0	0	3	6	9	3	1	22	4.7

*The district average is an average of the observation scores. In Table 9, the district average is computed as: $([3 \times 5] + [4 \times 10] + [5 \times 40] + [6 \times 20] + [7 \times 2]) \div 77 \text{ observations} = 5.1$

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*: 4.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-3**	0	0	6	7	5	1	1	20	4.2

*The district average is an average of the observation scores. In Table 10, the district average is computed as: $([3 \times 6] + [4 \times 7] + [5 \times 5] + [6 \times 1] + [7 \times 1]) \div 20 \text{ observations} = 4.2$

**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*: 4.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades 4-5**	0	0	0	5	4	2	0	11	4.7
Grades 6-8	0	2	10	8	4	0	0	24	3.6
Grades 9-12	0	3	4	5	7	3	0	22	4.1

*The district average is an average of the observation scores. In Table 11, the district average is computed as: $([2 \times 5] + [3 \times 14] + [4 \times 18] + [5 \times 15] + [6 \times 5]) \div 57 \text{ observations} = 4.0$

**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*: 3.5

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades 4-5**	0	1	4	3	2	1	0	11	3.8
Grades 6-8	0	7	6	7	4	0	0	24	3.3
Grades 9-12	4	1	6	5	4	2	0	22	3.5

*The district average is an average of the observation scores. In Table 12, the district average is computed as: $([1 \times 4] + [2 \times 9] + [3 \times 16] + [4 \times 15] + [5 \times 10] + [6 \times 3]) \div 57 \text{ observations} = 3.5$

**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*: 4.3

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-5	0	0	3	10	6	10	2	31	4.9
Grades 6-8	1	4	5	5	9	0	0	24	3.7
Grades 9-12	1	3	5	4	3	6	0	22	4.0

*The district average is an average of the observation scores. In Table 13, the district average is computed as: $([1 \times 2] + [2 \times 7] + [3 \times 13] + [4 \times 19] + [5 \times 18] + [6 \times 16] + [7 \times 2]) \div 77 \text{ observations} = 4.3$

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*: 4.3

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades K-3**	0	0	6	6	4	4	0	20	4.3

*The district average is an average of the observation scores. In Table 14, the district average is computed as: $([3 \times 6] + [4 \times 6] + [5 \times 4] + [6 \times 4]) \div 20 \text{ observations} = 4.3$

**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*: 3.7

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades 4-5**	0	1	3	2	3	1	1	11	4.3
Grades 6-8	3	0	8	7	6	0	0	24	3.5
Grades 9-12	4	3	3	4	5	3	0	22	3.5

*The district average is an average of the observation scores. In Table 15, the district average is computed as: $([1 \times 7] + [2 \times 4] + [3 \times 14] + [4 \times 13] + [5 \times 14] + [6 \times 4] + [7 \times 1]) \div 57$ observations = 3.7

**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*: 5.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7		
Grades 4-5**	0	0	0	0	3	7	1	11	5.8
Grades 6-8	0	0	0	6	9	9	0	24	5.1
Grades 9-12	0	2	2	7	6	5	0	22	4.5

*The district average is an average of the observation scores. In Table 16, the district average is computed as: $([2 \times 2] + [3 \times 2] + [4 \times 13] + [5 \times 18] + [6 \times 21] + [7 \times 1]) \div 57 \text{ observations} = 5.0$

**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	1	1	9	9	21	38	45	124	5.8
Positive Climate	0	0	0	1	6	16	8	31	6.0
Negative Climate**	0	0	1	0	1	2	27	31	6.7
Teacher Sensitivity	0	0	0	1	6	14	10	31	6.1
Regard for Student Perspectives	1	1	8	7	8	6	0	31	4.2
Classroom Organization Domain	1	0	0	1	24	33	34	93	6.0
Behavior Management	0	0	0	0	1	14	16	31	6.5
Productivity	1	0	0	0	5	8	17	31	6.2
Instructional Learning Formats***	0	0	0	1	18	11	1	31	5.4
Instructional Support Domain	0	2	22	33	24	19	4	104	4.5
Concept Development (K-3 only)	0	0	6	7	5	1	1	20	4.2
Content Understanding (UE only)	0	0	0	5	4	2	0	11	4.7
Analysis and Inquiry (UE only)	0	1	4	3	2	1	0	11	3.8
Quality of Feedback	0	0	3	10	6	10	2	31	4.9
Language Modeling (K-3 only)	0	0	6	6	4	4	0	20	4.3
Instructional Dialogue (UE only)	0	1	3	2	3	1	1	11	4.3
Student Engagement (UE only)	0	0	0	0	3	7	1	11	5.8

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: $([4 \times 1] + [5 \times 6] + [6 \times 16] + [7 \times 8]) \div 31 \text{ observations} = 6.0$

**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: $([3 \times 1] + [5 \times 1] + [6 \times 2] + [7 \times 27]) \div 31 \text{ observations} = 6.7$. 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	1	3	10	17	23	17	1	72	4.6
Positive Climate	0	0	0	7	8	9	0	24	5.1
Teacher Sensitivity	0	0	0	2	13	8	1	24	5.3
Regard for Student Perspectives	1	3	10	8	2	0	0	24	3.3
Classroom Organization Domain	0	1	0	6	5	23	37	72	6.2
Behavior Management	0	1	0	3	2	10	8	24	5.8
Productivity	0	0	0	3	3	10	8	24	6.0
Negative Climate**	0	0	0	0	0	3	21	24	6.9
Instructional Support Domain	4	13	31	30	36	6	0	120	3.8
Instructional Learning Formats	0	0	2	3	13	6	0	24	5.0
Content Understanding	0	2	10	8	4	0	0	24	3.6
Analysis and Inquiry	0	7	6	7	4	0	0	24	3.3
Quality of Feedback	1	4	5	5	9	0	0	24	3.7
Instructional Dialogue	3	0	8	7	6	0	0	24	3.5
Student Engagement	0	0	0	6	9	9	0	24	5.1

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: $([4 \times 7] + [5 \times 8] + [6 \times 9]) \div 24 \text{ observations} = 5.1$

**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: $([6 \times 3] + [7 \times 21]) \div 24 \text{ observations} = 6.9$

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	3	14	11	18	15	4	66	4.6
Positive Climate	0	1	4	3	6	5	3	22	4.9
Teacher Sensitivity	0	0	1	5	6	9	1	22	5.2
Regard for Student Perspectives	1	2	9	3	6	1	0	22	3.6
Classroom Organization Domain	0	0	1	0	5	14	46	66	6.6
Behavior Management	0	0	0	0	2	5	15	22	6.6
Productivity	0	0	1	0	3	6	12	22	6.3
Negative Climate**	0	0	0	0	0	3	19	22	6.9
Instructional Support Domain	9	10	21	24	28	17	1	110	4.0
Instructional Learning Formats	0	0	3	6	9	3	1	22	4.7
Content Understanding	0	3	4	5	7	3	0	22	4.1
Analysis and Inquiry	4	1	6	5	4	2	0	22	3.5
Quality of Feedback	1	3	5	4	3	6	0	22	4.0
Instructional Dialogue	4	3	3	4	5	3	0	22	3.5
Student Engagement	0	2	2	7	6	5	0	22	4.5

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: $([2 \times 1] + [3 \times 4] + [4 \times 3] + [5 \times 6] + [6 \times 5] + [7 \times 3]) \div 22 \text{ observations} = 4.9$

**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: $([6 \times 3] + [7 \times 19]) \div 22 \text{ observations} = 6.9$

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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 from Education Resource Strategies	Describes a process to help districts tie funding to specific student needs

Table D2. Resources to Support Curriculum and Instruction

Resource	Description
Quick Reference Guide: The Case for Curricular Coherence	This guide describes three types of curricular coherence that support student learning: vertical coherence, aligned tiers of instruction, and cross-subject coherence.
Increasing Access to Advanced Coursework	Describes how school districts can use the federal Every Student Succeeds Act (ESSA) to expand access to advanced coursework and increase students’ achievement in these courses.
CURATE	CURATE convenes panels of Massachusetts teachers to review and rate evidence on the quality and alignment of specific curricular materials, then publish their findings for educators across the Commonwealth to consult.

Table D3. Resources to Support Assessment

Resource	Description
DESE’s District Data Team Toolkit	A set of resources to help a district establish, grow, and maintain a culture of inquiry and data use through a district data team.

Table D4. Resources to Support Human Resources and Professional Development

Resource	Description
Quick Reference Guide: Opportunities to Streamline the Evaluation Process	This guide will help 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?
<i>Identifying Meaningful Professional Development</i>	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.
<i>The Educator Effectiveness Guidebook for Inclusive Practice</i>	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 Behavior Interventions and Supports, and social-emotional learning.
<i>Making Inclusive Education Work</i> 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 D5. Resources to Support Student Support

Resource	Description
https://www.doe.mass.edu/sfss/mtss/	A multitiered system of support is a framework for how school districts can build the necessary systems to ensure that all students receive a high-quality educational experience.

Table D6. Resources to Support Financial and Asset Management

Resource	Description
<i>Spending Money Wisely: Getting the Most From School District Budgets</i>	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.

The COVID 19 pandemic had a profound impact on the 2020-21 school year. Data reported below may have been affected by the pandemic. Please keep this in mind when reviewing the data and take particular care when comparing data over multiple school years.

**Table 1: Needham 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	2,556	514.6	515.4	511.1	-3.5	496.5	14.6
African American/Black	95	500.1	496.7	493.2	-6.9	486.4	6.8
Asian	255	522.0	524.3	516.4	-5.6	508.5	7.9
Hispanic/Latino	166	507.7	507.2	503.0	-4.7	484.3	18.7
Multi-Race	129	517.8	518.5	516.9	-0.9	499.7	17.2
White	1,909	514.7	515.7	511.6	-3.1	501.3	10.3
High Needs	781	499.3	499.3	496.6	-2.7	485.9	10.7
Econ. Dis.	191	499.9	500.6	496.1	-3.8	485.2	10.9
EL and Former EL	181	501.8	504.7	501.6	-0.2	482.8	18.8
SWD	553	495.6	495.0	491.9	-3.7	478.1	13.8

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

**Table 2: Needham Public Schools
Next-Generation MCAS Math Scaled Scores in Grades 3--8, 2018--2021**

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/Below
All	2,554	511.4	512.2	505.7	-5.7	489.7	16.0
African American/Black	94	493.0	492.5	485.1	-7.9	477.3	7.8
Asian	254	524.1	526.0	519.1	-5.0	508.6	10.5
Hispanic/Latino	167	501.8	502.0	493.0	-8.8	476.5	16.5
Multi-Race	129	515.6	516.9	512.4	-3.2	492.1	20.3
White	1,908	511.2	512.1	505.6	-5.6	494.3	11.3
High Needs	784	496.2	496.6	490.0	-6.2	479.0	11.0
Econ. Dis.	192	495.4	494.0	485.7	-9.7	477.4	8.3
EL and Former EL	182	502.2	504.7	500.5	-1.7	477.8	22.7
SWD	555	491.3	491.7	484.4	-6.9	472.5	11.9

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

**Table 3: Needham Public Schools
Next-Generation MCAS ELA Percent Meeting or Exceeding Expectations in Grades 3--8, 2018--2021**

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/Below
All	2,556	76%	76%	72%	-4	46%	26%
African American/Black	95	38%	39%	33%	-5	28%	5%
Asian	255	87%	87%	80%	-7	66%	14%
Hispanic/Latino	166	65%	64%	55%	-10	26%	29%
Multi-Race	129	81%	79%	83%	2	51%	32%
White	1,909	76%	78%	73%	-3	54%	19%
High Needs	781	46%	47%	43%	-3	28%	15%
Econ. Dis.	191	49%	47%	40%	-9	27%	13%
EL and Former EL	181	56%	56%	55%	-1	24%	31%
SWD	553	37%	38%	33%	-4	16%	17%

**Table 4: Needham Public Schools
Next-Generation MCAS Math Percent Meeting or Exceeding Expectations in Grades 3--8, 2018--2021**

Group	N (2021)	2018	2019	2021	Change	State (2021)	Above/Below
All	2,554	72%	73%	62%	-10	33%	29%
African American/Black	94	33%	36%	22%	-11	14%	8%
Asian	254	90%	89%	80%	-10	64%	16%
Hispanic/Latino	167	54%	54%	40%	-14	14%	26%
Multi-Race	129	76%	77%	73%	-3	37%	36%
White	1,908	73%	74%	63%	-10	40%	23%
High Needs	784	40%	40%	32%	-8	16%	16%
Econ. Dis.	192	40%	37%	28%	-12	14%	14%
EL and Former EL	182	54%	61%	51%	-3	17%	34%
SWD	555	29%	30%	22%	-7	10%	12%

**Table 5: Needham Public Schools
Next Generation MCAS ELA and Math Scaled Scores in Grade 10, 2021**

Group	ELA				Math			
	N (2021)	2021	State	Above/Below	N (2021)	2021	State	Above/Below
All	366	524.7	507.3	17.4	367	520.3	500.6	19.7
African American/Black	5	--	494.6	--	5	--	486.7	--
Asian	26	536.6	518.2	18.4	26	533.1	520.9	12.2
Hispanic/Latino	25	514.5	491.9	22.6	24	505.4	485.3	20.1
Multi-Race	17	534.7	510.6	24.1	17	530.3	503.9	26.4
White	293	524.3	512.5	11.8	295	520.1	504.9	15.2
High Needs	79	503.2	493.3	9.9	81	497.8	486.5	11.3
Econ. Dis.	14	505.0	493.7	11.3	14	505.8	486.6	19.2
EL and Former EL	2	--	477.9	--	2	--	477.6	--
SWD	69	501.8	487.2	14.6	71	494.8	479.6	15.2

**Table 6: Needham Public Schools
Next Generation MCAS ELA and Math Percent Meeting or Exceeding Expectations in Grade 10, 2021**

Group	ELA				Math			
	N (2021)	2021	State	Above/Below	N (2021)	2021	State	Above/Below
All	366	90%	64%	26	367	85%	52%	33
African American/Black	5	--	41%	--	5	--	27%	--
Asian	26	100%	80%	20	26	96%	80%	16
Hispanic/Latino	25	72%	39%	33	24	63%	26%	37
Multi-Race	17	100%	67%	33	17	100%	55%	45
White	293	91%	73%	18	295	86%	60%	26
High Needs	79	58%	39%	19	81	46%	26%	20
Econ. Dis.	14	64%	41%	23	14	64%	27%	37
EL and Former EL	2	--	19%	--	2	--	15%	--
SWD	69	54%	25%	29	71	39%	14%	25

**Table 7: Needham Public Schools
Next Generation MCAS Science Meeting or Exceeding Expectations in Grades 5 and 8, 2019—2021**

Group	N (2021)	2019	2021	State (2021)	Above/Below
All	842	70%	62%	42%	20
African American/Black	19	44%	5%	19%	-14
Asian	69	84%	77%	62%	15
Hispanic/Latino	59	50%	47%	20%	27
Multi-Race, non-Hisp./Lat.	48	71%	77%	47%	30
White	646	72%	63%	50%	13
High Needs	249	41%	35%	23%	12
Econ. Dis.	56	35%	30%	21%	9
EL and Former EL	50	59%	44%	18%	26
SWD	179	36%	28%	15%	13

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 CD requirements is available at <https://www.doe.mass.edu/mcas/graduation.html>.

**Table 8: Needham Public Schools
Next-Generation MCAS ELA Percent Meeting or Exceeding Expectations in Grades 3--10, 2018—2021**

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/Below
3	421	72%	74%	70%	-2	51%	19%
4	438	69%	69%	70%	1	49%	21%
5	439	72%	73%	77%	5	47%	30%
6	390	79%	81%	72%	-7	47%	25%
7	447	77%	77%	70%	-7	43%	27%
8	421	85%	86%	69%	-16	41%	28%
3--8	2,556	76%	76%	72%	-4	46%	26%
10	366	--	84%	90%	--	64%	26%

Table 9: Needham Public Schools
Next-Generation MCAS Math Percent Meeting or Exceeding Expectations in Grades 3--10, 2018--2021

Grade	N (2021)	2018	2019	2021	Change	State (2021)	Above/Below
3	421	67%	65%	49%	-18	33%	16%
4	438	61%	59%	60%	-1	33%	27%
5	438	66%	69%	62%	-4	33%	29%
6	388	79%	76%	60%	-19	33%	27%
7	446	80%	85%	72%	-8	35%	37%
8	423	81%	83%	68%	-13	32%	36%
3--8	2,554	72%	73%	62%	-10	33%	29%
10	367	--	88%	85%	--	52%	33%

Table 10: Needham Public Schools
Next-Generation MCAS Science Percent Meeting or Exceeding Expectations in Grades 5 and 8, 2019--2021

Grade	N (2021)	2019	2020	2021	3-yr change	State (2021)
5	437	65%	--	59%	-6	42%
8	405	76%	--	66%	-10	41%
5 and 8	842	70%	--	62%	-8	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 CD requirements is available at <https://www.doe.mass.edu/mcas/graduation.html>. In 2019 10th graders took the Legacy MCAS science test.

Table 11: Needham Public Schools
English Language Arts and Math Mean Student Growth Percentile in Grades 3--10, 2019--2021

Grade	ELA				Math			
	N (2021)	2019	2021	State (2021)	N (2021)	2019	2021	State (2021)
3	--	--	--	--	--	--	--	--
4	--	50.5	--	--	--	42.7	--	--
5	408	57.4	54.5	34.9	408	60.0	51.4	31.9
6	358	65.6	53.0	37.3	355	60.5	41.0	26.3
7	404	57.7	49.5	36.1	404	59.6	56.9	35.8
8	397	64.9	37.5	34.8	398	60.4	43.8	27.4
3--8	1,567	59.2	48.5	35.8	1,565	56.9	48.5	30.4
10	343	50.2	49.3	52.5	344	55.7	39.1	36.5

Table 12: Needham Public Schools
Next-Generation MCAS ELA Percent Meeting or Exceeding Expectations by Grade and School, 2021

School	3	4	5	6	7	8	3--8	10
Broadmeadow	88%	79%	80%	--	--	--	82%	--
Eliot	59%	66%	77%	--	--	--	67%	--
Sunita Williams	68%	68%	85%	--	--	--	73%	--
Mitchell	62%	79%	78%	--	--	--	74%	--
Newman	77%	64%	73%	--	--	--	72%	--
Pollard Middle	--	--	--	--	72%	70%	71%	--
High Rock School	--	--	--	73%	--	--	73%	--
Needham High	--	--	--	--	--	--	--	92%
District	70%	70%	77%	72%	70%	69%	72%	90%
State	51%	49%	47%	47%	43%	41%	46%	64%

Table 13: Needham Public Schools
Next-Generation MCAS Math Percent Meeting or Exceeding Expectations by Grade and School, 2021

School	3	4	5	6	7	8	3--8	10
Broadmeadow	64%	68%	60%	--	--	--	64%	--
Eliot	51%	45%	68%	--	--	--	55%	--
Sunita Williams	52%	55%	73%	--	--	--	59%	--
Mitchell	44%	77%	66%	--	--	--	64%	--
Newman	42%	55%	52%	--	--	--	49%	--
Pollard Middle	--	--	--	--	73%	69%	71%	--
High Rock School	--	--	--	61%	--	--	61%	--
Needham High	--	--	--	--	--	--	--	87%
District	49%	60%	62%	60%	72%	68%	62%	85%
State	33%	33%	33%	33%	35%	32%	33%	52%

Table 14: Needham Public Schools
Next-Generation MCAS Science Percent Meeting or Exceeding Expectations by Grade and School, 2021

School	5	8	5 and 8	10
Broadmeadow	65%	--	65%	--
Eliot	61%	--	61%	--
Sunita Williams	68%	--	68%	--
Mitchell	62%	--	62%	--
Newman	46%	--	46%	--
Pollard Middle	--	67%	67%	--
High Rock School	--	--	--	--
Needham High	--	--	--	--
District	59%	66%	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 CD requirements is available at <https://www.doe.mass.edu/mcas/graduation.html>.

Table 15: Needham Public Schools
Next-Generation MCAS ELA Percent Meeting and Exceeding Expectations in Grades 3—8 by School, 2021

School	All	High Needs	Econ. Dis.	SWD	EL and Former EI	African American	Asian	Hispanic	Multi-race	White
Broadmeadow	82%	54%	58%	49%	62%	--	76%	75%	100%	83%
Eliot	67%	41%	43%	24%	70%	44%	67%	31%	73%	75%
Sunita Williams	73%	48%	--	33%	66%	--	77%	67%	94%	73%
Mitchell	74%	42%	38%	35%	43%	--	85%	--	90%	76%
Newman	72%	51%	38%	47%	57%	23%	92%	31%	75%	74%
Pollard Middle	71%	37%	41%	28%	38%	45%	92%	61%	79%	71%
High Rock School	73%	47%	43%	36%	67%	25%	87%	75%	78%	75%
Needham High	--	--	--	--	--	--	--	--	--	--
District	72%	43%	40%	33%	55%	33%	80%	55%	83%	73%
State	46%	28%	27%	16%	24%	28%	66%	26%	51%	54%

**Table 16: Needham Public Schools
Next-Generation MCAS Math Percent Meeting and Exceeding Expectations in Grades 3–8 by School, 2021**

School	All	High Needs	Econ. Dis.	SWD	EL and Former EI	African American	Asian	Hispanic	Multi-race	White
Broadmeadow	64%	30%	25%	26%	38%	--	81%	55%	92%	63%
Eliot	55%	25%	18%	11%	50%	19%	59%	19%	64%	62%
Sunita Williams	59%	32%	--	19%	51%	--	69%	33%	72%	60%
Mitchell	64%	28%	15%	21%	43%	--	85%	--	80%	64%
Newman	49%	30%	21%	21%	57%	38%	88%	15%	63%	47%
Pollard Middle	71%	39%	43%	26%	58%	40%	97%	50%	74%	72%
High Rock School	61%	36%	30%	25%	52%	25%	89%	40%	78%	61%
Needham High	--	--	--	--	--	--	--	--	--	--
District	62%	32%	28%	22%	51%	22%	80%	40%	73%	63%
State	33%	16%	14%	10%	17%	14%	64%	14%	37%	40%

**Table 17: Needham Public Schools
Next-Generation MCAS ELA Meeting or Exceeding Expectations in Grade 10, 2021**

School	All	High Needs	Econ. Dis.	SWD	EL and Former EI	African American	Asian	Hispanic	Multi-race	White
Needham High	92%	62%	64%	57%	--	--	100%	72%	100%	92%
District	90%	58%	64%	54%	--	--	100%	72%	100%	91%
State	64%	39%	41%	25%	19%	41%	80%	39%	67%	73%

**Table 18: Needham Public Schools
Next-Generation MCAS Math Meeting or Exceeding Expectations in Grade 10, 2021**

School	All	High Needs	Econ. Dis.	SWD	EL and Former EI	African American	Asian	Hispanic	Multi-race	White
Needham High	87%	50%	64%	44%	--	--	96%	63%	100%	88%
District	85%	46%	64%	39%	--	--	96%	63%	100%	86%
State	52%	26%	27%	14%	15%	27%	80%	26%	55%	60%

**Table 19: Needham Public Schools
Next-Generation MCAS Science Percent Meeting and Exceeding Expectations in Grades 5—8 by School, 2021**

School	All	High Needs	Econ. Dis.	SWD	EL and Former EI	African American	Asian	Hispanic	Multi-race	White
Broadmeadow	65%	39%	--	33%	--	--	100%	40%	--	68%
Eliot	61%	28%	--	14%	--	--	69%	--	--	62%
Sunita Williams	68%	41%	--	35%	--	--	80%	--	--	65%
Mitchell	62%	20%	--	8%	--	--	--	--	--	60%
Newman	46%	38%	--	29%	45%	--	--	--	--	52%
Pollard Middle	67%	37%	33%	34%	37%	--	95%	54%	85%	67%
High Rock School	--	--	--	--	--	--	--	--	--	--
Needham High	--	--	--	--	--	--	--	--	--	--
District	62%	35%	30%	28%	44%	5%	77%	47%	77%	63%
State	42%	23%	21%	15%	18%	19%	62%	20%	47%	50%

**Table 20: Needham Public Schools
Four-Year Cohort Graduation Rates by Student Group, 2017--2020**

Group	N (2020)	2017	2018	2019	2020	4-yr Change	State (2020)
All	406	97.6	96.8	97.3	98.5	0.9	89.0
African American/Black	12	100	92.9	88.2	91.7	-8.3	83.1
Asian	33	100	100	95.1	100	0.0	95.0
Hispanic/Latino	21	100	91.3	100	100	0.0	77.2
Multi-Race, non-Hisp./Lat.	17	100	--	100	94.1	-5.9	88.6
White	323	97.1	97.0	97.7	98.8	1.7	93.2
High Needs	112	92.7	88.1	89.1	94.6	1.9	81.1
Economically Disadvantaged*	48	92.2	92.7	85.3	93.8	1.6	80.6
EL	3	--	--	--	--	--	68.3
SWD	81	90.0	85.9	88.4	93.8	3.8	74.9

* Four-year cohort graduation rate for students from low-income families used for 2017, 2018, and 2019 rates.

**Table 21: Needham Public Schools
Five-Year Cohort Graduation Rates by Student Group, 2016--2019**

Group	N (2019)	2016	2017	2018	2019	4-yr Change	State (2019)
All	449	98.1	98.5	98.0	98.2	0.1	90.1
African American/Black	17	100	100	92.9	94.1	-5.9	84.1
Asian	41	96.8	100	100	97.6	0.8	96.3
Hispanic/ Latino	20	100	100	95.7	100	0.0	78.5
Multi-Race, non-Hisp./Lat.	16	91.7	100	--	100	8.3	90.3
White	355	98.3	98.2	98.2	98.3	0.0	93.9
High Needs	110	93.8	95.5	92.7	92.7	-1.1	82.4
Low Income	34	98.0	96.1	92.7	91.2	-6.8	82.0
ELs	2	--	--	--	--	--	71.1
SWD	86	91.1	93.8	91.8	91.9	0.8	78.2

**Table 22: Needham Public Schools
In-School Suspension Rates by Student Group, 2018--2021**

Group	2018	2019	2020	2021	4-yr Change	State (2021)
All	1.0	0.6	0.6	0.2	-0.8	0.3
African American/Black	2.4	--	--	--	--	0.3
Asian	--	--	--	--	--	0.0
Hispanic/Latino	2.5	1.2	1.4	--	--	0.2
Multi-Race, non-Hispanic or Latino	--	--	--	--	--	0.4
White	0.9	0.5	0.5	0.1	-0.8	0.3
High Needs	3.0	1.5	1.5	0.4	-2.6	0.4
Economically Disadvantaged*	5.1	3.2	2.8	--	--	0.3
ELs	--	--	--	--	--	0.1
SWD	3.6	1.7	1.8	0.5	-3.1	0.6

**Table 23: Needham Public Schools
Out-of-School Suspension Rates by Student Group, 2018--2021**

Group	2018	2019	2020	2021	4-yr Change	State (2021)
All	0.9	0.7	0.4	0.1	-0.8	0.5
African American/Black	2.4	--	--	--	--	0.6
Asian	--	--	--	--	--	0.1
Hispanic/Latino	1.8	2.0	0.6	--	--	0.5
Multi-Race, non-Hispanic or Latino	--	--	--	--	--	0.7
White	0.8	0.5	0.4	0.1	-0.7	0.5
High Needs	2.0	1.6	1.1	0.1	-1.9	0.7
Economically Disadvantaged*	2.7	2.7	1.8	--	--	0.7
ELs	--	--	--	--	--	0.3
SWD	2.6	1.7	1.3	0.2	-2.4	1.1

**Table 24: Needham Public Schools
Dropout Rates by Student Group, 2017--2020**

Group	N (2020)	2017	2018	2019	2020	4-yr Change	State (2020)
All	1,655	0.1	0.1	0.3	0.0	-0.1	1.6
African American/Black	34	1.8	0.0	0.0	0.0	-1.8	2.2
Asian	137	0.0	0.0	0.7	0.0	0.0	0.5
Hispanic/Latino	83	0.0	0.0	1.3	0.0	0.0	3.5
Multi-Race, non-Hisp./Lat.	77	0.0	0.0	1.4	0.0	0.0	1.6
White	1,321	0.0	0.1	0.2	0.0	0.0	0.9
High Needs	339	0.0	0.0	1.4	0.0	0.0	2.9
Economically Disadvantaged*	71	0.0	0.0	2.5	0.0	0.0	3.1
ELs	7	0.0	0.0	0.0	0.0	0.0	5.6
SWD	281	0.0	0.0	1.7	0.0	0.0	2.6

**Table 25: Needham Public Schools
Advanced Coursework Completion Rates by Student Group, 2018--2020**

Group	N (2020)	2018	2019	2020	3-yr Change	State (2020)
All	824	87.6	89.0	95.0	7.4	65.7
African American/Black	20	60.0	70.4	70.0	10.0	54.2
Asian	69	95.7	95.9	97.1	1.4	84.0
Hispanic/Latino	38	80.5	82.9	94.7	14.2	50.0
Multi-Race, non-Hisp./Lat.	33	80.0	93.5	90.9	10.9	65.6
White	664	88.7	89.2	95.8	7.1	70.0
High Needs	190	52.7	59.8	81.1	28.4	47.3
Economically Disadvantaged*	60	70.0	61.7	80.0	10.0	48.9
ELs	1	--	--	--		27.1
SWD	147	44.9	55.9	78.9	34.0	33.2