Medford Public Schools

Comprehensive District Review Report

April 2023

Contents

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

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Executive Summary

In accordance with Massachusetts state law, the Massachusetts Department of Elementary and Secondary Education (DESE) contracted with the American Institutes for Research® (AIR®) to conduct a comprehensive review of Medford Public Schools (hereafter, Medford) in April 2023. Data collection activities associated with the review focused on understanding how district systems, structures, and practices operate in support of 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.[1]

Leadership and Governance

The superintendent of Medford is Dr. Marice Edouard-Vincent, who was appointed superintendent in 2018. She receives support from three assistant superintendents (enrichment and innovation, academics and instruction, and finance and operations) and a director of student services. At the time of the site visit, the assistant superintendent for finance and operations position was vacant because the individual had recently resigned. Strengths of the district include a close working relationship between the superintendent and the district leadership team to implement the strategic plan; a focus on improving teacher practice and student learning outcomes; alignment between school improvement plans and the district strategic plan; an emphasis on instructional improvement to address achievement and opportunity gaps; and school leader autonomy regarding spending decisions. Areas for growth include documentation and clarification of school committee roles, procedures, and processes; the relationship between the district and the union; the process for developing and updating the district strategic plan; and adjusting the timeline for budget approval.

Curriculum and Instruction

Medford offers standards-aligned curricula in digital literacy, English language arts (ELA), fine arts, health and physical education, library, mathematics, science, social studies, and world languages. Curriculum directors at the district level lead the curricular review process for the district. School-based educators participate in the decision-making process when selecting the curricula. The role of the curriculum director was recently redesigned to focus on K-12 alignment within each content area. Strengths of the district include capacity to support instructional alignment across all schools through K-12 curriculum directors; teacher involvement in selecting curricular resources; alignment between the curriculum selection process and the strategic plan; the Instructional Academic Team (IAT) structure at the high school level; and increased consistency of access to rigorous grade level curriculum and instruction at the elementary level. Areas for growth for the district include improved structures to support instructional differentiation to support all students; and reviewing effectiveness of policy changes related to advanced coursework access.

Four observers, who focused primarily on instruction in the classroom, visited Medford during the week of April 3, 2023. The observers conducted 81 observations in a sample of classrooms across grade levels, focused on literacy, ELA, and mathematics. The Teachstone Classroom Assessment

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

Scoring System (CLASS) protocol, developed by the Center for Advanced Study of Teaching and Learning at the University of Virginia,[2] guided all classroom observations in the district. These observations used the three grade-band levels of the CLASS protocols: K-3, Upper Elementary (4-5), and Secondary (6-12). Overall, for the K-5 grade band, instructional observations suggest generally mixed evidence of emotional support, classroom organization, student engagement (Grades 4-5), and rigorous instructional support. For the 6-8 grade band, instructional observations provide mixed evidence of emotional support, classroom organization, student engagement, and rigorous instructional support. For the 9-12 grade band, instructional observations provide mixed evidence of emotional support, classroom organization, student engagement, and rigorous instructional support.

Assessment

Medford collects and uses multiple sources of data throughout the year. The district administers statewide assessments, such as the Massachusetts Comprehensive Assessment System (MCAS), as well as other comprehensive assessment systems, such as the NWEA's[3] Measures of Academic Progress (MAP), to monitor student progress toward state proficiency standards and benchmarks. Districtwide assessments align across grade levels and subject areas. District leaders provide presentations to the community regarding district- and school-level student assessment results. They support schools' capacity to use data to help instructional staff improve their practice. Strengths of the district include the collection of multiple sources of data and aligned formative assessment practices across grades and subject areas. Areas for growth include identifying improved systems and structures that support the regular use of data to inform decision making at the classroom level and consistency in the communication of student performance and progress to parents and families.

Human Resources and Professional Development

The Finance and Operations Office, under the leadership of the assistant superintendent for finance and operations, oversees Medford's human resources department. The district has designated central office staff to support both human resources and professional development throughout the district. Medford clearly prioritizes recruiting and retaining diverse candidates, as noted by nearly all interview respondents. The district has a comprehensive professional development plan, which clearly aligns with the objectives of the district's strategic plan. Furthermore, Medford's Professional Development Advisory Council (PDAC) advises the district in providing high-quality professional development opportunities for all staff Strengths of the district include the use of specific strategies to recruit diverse candidates; professional development to increase equitable practices and effective feedback through the evaluation process; and a representative committee which develops professional development plans for the district. Areas for growth include the current hiring and recruitment system; equity of staffing assignments; efforts to include areas of improvement in teacher and administrator evaluations; and increased opportunities for educator recognition, leadership, development and advancement.

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[2] For more information on the Teachstone CLASS protocol, visit https://teachstone.com/class/.
[3] NWEA was formerly known as the Northwest Evaluation Association.

Student Support

Medford highlights the importance of and prioritizes increasing school capacity to create a safe and supportive learning environment for all students. Although consistency in implementation varies by school, the district adopted Responsive Classroom and the Nexus program across elementary classrooms and a Restorative Justice approach to behavior management in the middle and high schools. The district launched a districtwide vision for a multitiered system of support (MTSS; referred to by the district as response to intervention) by developing protocols and procedures to guide practice and promote consistent implementation districtwide. However, feedback across focus groups suggests that implementation of these protocols and procedures is very low throughout the district, with inconsistencies remaining across buildings. The district facilitates home-school communication to foster strong partnerships using different methods, including TalkingPoints, which makes communication accessible by providing information in families' home languages. Nevertheless, district staff members recognize communication as an improvement area and suggest a need to ensure staff capacity for facilitating timely, accurate, and equitable processes for the two-way exchange of ideas and information. Strengths of the district include the prioritization of safe and supportive learning environments within the strategic plan; the adoption of Responsive Classroom and Nexus programming across all elementary schools; a districtwide vision for student support structures; and increased capacity to support home-school communication in families' home languages. Areas for growth for the district include school safety and building consistently strong relationships between adults and students, especially at the high school level; implementing the district vision for student support structures; and consistency in family-school communication throughout the district.

Financial and Asset Management

In Medford, developing and maintaining an operating budget is a collaborative and inclusive effort. For example, the finance department includes accounts payable and payroll specialists, a grants coordinator, and a comptroller, who reports to the assistant superintendent of finance and operations. In addition, the district has partnered with the District Management Group to help the district develop staffing, scheduling, and resource allocation plans. Medford also is involved in financial capital planning. Nevertheless, a need exists for increased coordination among district leaders, the school committee, and the City of Medford related to addressing potential changes and shortfalls within the budget. The district's financial software for tracking, forecasting, and controls for properly managing the budget also has limited capacity. Strengths include clear, accurate, complete, and user-friendly budget documents; district spending that exceeds net school spending requirements; and collaboration with the City of Medford for capital planning. Areas for growth include alignment of publicly available budget documents to the strategic plan; increasing collaboration between district leaders, the school committee, and the City of Medford to plan for and address potential changes and/or shortfalls within the budget; and improved infrastructure to support tracking, forecasting, and controls.

Medford Public Schools: District Review Overview

Purpose

Conducted under Chapter 15, Section 55A of the Massachusetts General Laws, comprehensive 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. Reviews identify systems and practices that may be impeding improvement as well as those most likely to be contributing to positive results. The design of the comprehensive district review promotes district reflection on its own performance and potential next steps. In addition to providing information to each district reviewed, DESE uses review reports to identify resources and/or technical assistance to provide to the district.

Methodology

A district review team consisting of AIR staff members and subcontractors, with expertise in each district standard, reviews documentation and extant data 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. Virtual interviews and focus groups also are conducted as needed. Information about review activities and the site visit schedule is in Appendix A. Team members also observe classroom instruction and collect data using the CLASS protocol. The Districtwide Instructional Observation Report resulting from these classroom observations is in Appendix B.

Following the site visit, the team members code and analyze the data to develop a set of objective findings. The team lead and multiple quality assurance reviewers, including DESE staff, then review the initial draft of the report. DESE staff provides recommendations for the district, based on the findings of strengths and areas of growth identified, before AIR finalizes and submits the report to DESE. DESE previews and then sends the report to the district for factual review before publishing it on the DESE website. DESE also provides additional resources to support implementation of DESE's District Standards and Indicators, summarized in Appendix C.

Site Visit

The site visit to Medford was conducted during the week of April 3, 2023. The site visit included 24 hours of interviews and focus groups with approximately 90 stakeholders, including school committee members, district administrators, school staff, students, students' families, and teachers' association representatives. The review team conducted six teacher focus groups with 18 elementary school teachers, 11 middle school teachers, and 15 high school teachers. The review team also conducted nine focus groups with approximately 20 students and approximately 50 family/community members.

The site team also conducted 81 observations of classroom instruction in seven schools. Certified team members conducted instructional observations using the Teachstone CLASS protocol.

District Profile

Medford's superintendent is Dr. Marice Edouard-Vincent, who was appointed superintendent in 2018. She receives support from three assistant superintendents (enrichment and innovation, academics and instruction, and finance and operations) and a director of student services. At the time of the site visit, the assistant superintendent for finance and operations position was vacant because the individual had recently resigned. The district is governed by a school committee composed of seven members who are elected for two-year terms.

In the 2022-2023 school year, there were 394.2 full-time equivalent teachers in the district, with 4,166 students enrolled in the district's eight schools. Table 1 provides an overview of student enrollment by school.

Table 1. Schools, Type, Grades Served, and Enrollment, 2022-2023

School	Type	Grades served	Enrollment
Brooks Elementary School	Elementary	PK-5	547
Roberts School	Elementary	PK-5	552
Missituk Elementary School	Elementary	PK-5	391
John J. McGlynn Sr. Elementary School	Elementary	PK-5	481
John J. McGlynn Sr. Middle School	Middle	6-8	461
Madeleine Dugger Andrews Middle School	Middle	6-8	456
Curtis-Tufts High School	High	9-12	18
Medford High School	High	9-12	1,260
Total			**4,166**

Note. Enrollment data as of October 1, 2022.

Between 2020 and 2023, overall student enrollment decreased by 37 students. Enrollment figures by race/ethnicity and high needs populations (i.e., students with disabilities, students from low-income families, and English learners [ELs] and former ELs) compared with the state are in Tables D1 and D2 in Appendix D. Appendix D also provides additional information about district enrollment, attendance, and expenditures.

The total in-district per-pupil expenditure was greater than the median in-district per-pupil expenditure for K-12 districts of similar size in fiscal year 2021—$20,565 for Medford compared with $16,109 for similar districts and greater than the average state spending per pupil ($18,560). Actual net school spending was greater than what is required by the Chapter 70 state education aid program, as shown in Table D4 in Appendix D.

Student Performance

In ELA in Grades 3-8, the percentage of students scoring Meeting Expectations or Exceeding Expectations on the Next-Generation MCAS declined 8 percentage points from 48 percent in 2019 to 40 percent in 2022, which was below the 2022 state rate of 41 percent. In Grade 10, the percentage of students scoring Meeting Expectations or Exceeding Expectations decreased by 9 percentage points from 62 percent in 2019 to 53 percent in 2022, which was below the 2022 state rate of 58 percent (see Tables E1 and E2 in Appendix E).

- In Grades 3-8, the percentage of students scoring Meeting Expectations or Exceeding Expectations was above the state rate by 1 percentage point to 4 percentage points for students with disabilities, Hispanic/Latino students, Native American students, and Multi-Race, non-Hispanic/Latino students; below the state rate by 8 percentage points and 16 percentage points for African American/Black students and Asian students, respectively; and below the state rate by 1 percentage point to 3 percentage points for every other student group with reportable data.

- In Grade 10, the percentage of students scoring Meeting Expectations or Exceeding Expectations was below the state rate by 10 percentage points to 14 percentage points for Asian students, high needs students, and ELs and former ELs and below the state rate by 5 percentage points to 9 percentage points for every other student group with reportable data.

In mathematics in Grades 3-8, the percentage of students scoring Meeting Expectations or Exceeding Expectations on the Next-Generation MCAS declined 8 percentage points from 40 percent in 2019 to 32 percent in 2022, which was below the 2022 state rate of 39 percent. In Grade 10, the percentage of students scoring Meeting Expectations or Exceeding Expectations declined 13 percentage points from 56 percent in 2019 to 43 percent in 2022, which was below the 2022 state rate of 50 percent (see Tables E3 and E4 in Appendix E).

- In Grades 3-8, the percentage of students scoring Meeting Expectations or Exceeding Expectations was below the state rate by 8 percentage points to 16 percentage points for African American/Black students, Asian students, Native American students, and White students and below the state rate by 1 percentage point to 5 percentage points for every other student group with reportable data.

- In Grade 10, the percentage of students scoring Meeting Expectations or Exceeding Expectations was equal to the state rate for African American/Black students and Hispanic/Latino students and below the state rate by 7 percentage points to 15 percentage points for every other student group with reportable data.

In science in Grades 5 and 8, the percentage of students scoring Meeting Expectations or Exceeding Expectations on the Next-Generation MCAS declined 4 percentage points from 42 percent in 2019 to 38 percent in 2022, which was below the 2022 state rate of 42 percent. In Grade 10, 46 percent of all students scored Meeting Expectations or Exceeding Expectations in 2022, which was slightly below the 2022 state rate of 47 percent (see Tables E5 and E6 in Appendix E).

- In Grades 5 and 8, the percentage of students scoring Meeting Expectations or Exceeding Expectations in science was above the state rate by 1 percentage point to 2 percentage

points for Hispanic/Latino students and Multi-Race, non-Hispanic/Latino students; below the state rate by 17 percentage points for Asian students; and below the state rate by 3 percentage points to 7 percentage points for every other student group with reportable data.

- In Grade 10, the percentage of students scoring Meeting Expectations or Exceeding Expectations in science was above the state rate by 2 percentage points to 5 percentage points for African American/Black students, Hispanic/Latino students, and Multi-Race, non-Hispanic/Latino students; below the state rate by 7 percentage points and 13 percentage points for ELs and former ELs and Asian students, respectively; and below the state rate by 1 percentage point to 4 percentage points for every other student group with reportable data.

The average student growth percentile (SGP) on the 2022 MCAS assessments in Grades 3-8 was 46.6 in ELA and 50.9 in math, which represent typical growth. In Grade 10, SGP was typical in ELA (53.5) and high in mathematics (60.5)4 (see Tables E7-E10 in Appendix E).

- SGPs in Grades 3-8 in ELA were typical, ranging from 42.9 to 49.3 for each student group with reportable data, except for students with disabilities, which was low (39.6). Mathematics SGPs were typical for each student group with reportable data, ranging from 44.6 to 54.6.

- In Grade 10, ELA SGPs were typical for each student group with reportable data, ranging from 44.8 to 59.5, and low for Hispanic/Latino students (36.5) and students with disabilities (38.9). Mathematics SGPs were typical for each student group with reportable data ranging from 41.3 to 59.4, and high for African American/Black students (66.1) and Asian students (66.7).

Medford's four-year cohort graduation rate for all students increased 2.6 percentage points from 88.8 percent in 2020 to 91.4 percent in 2022, which was above the 2022 state rate of 90.1 percent. The five-year cohort graduation rate for all students increased 0.9 percentage point from 92.5 percent in 2019 to 93.4 percent in 2021, which was above the 2021 state rate of 91.8 percent (see Tables E16 and E17 in Appendix E).

- The four-year-cohort graduation rate was below the state rate by 2.1 percentage points to 5.1 percentage points for Asian students, White students, and ELs; above the state rate by 8.1 percentage points and 9.8 percentage points for students with disabilities and African American/Black students, respectively; and above the state rate by 2.9 percentage points to 5.2 percentage points for every other group with reportable data.

- The five-year cohort graduation rate was below the state rate by 0.3 percentage point for White students and Multi-Race, non-Hispanic/Latino students; below the state rate by 7.3 percentage points and 11.3 percentage points for Asian students and ELs, respectively; above the state rate by 1.7 percentage points and 2.2 for students with disabilities and high needs students, respectively; and above the state rate by 6.1 percentage to 8.6 percentage points for African American/Black students, Hispanic/Latino students, and students from low-income families.

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4 Average SGP ranges: Very Low Growth = 1.0-29.9, Low Growth = 30.0-39.9, Typical Growth = 40.0-59.9, 5 CURATE: CUrriculum RAtings by TEachers. See https://www.doe.mass.edu/instruction/curate.

The district's annual dropout rate increased from 1.1 percent in 2020 to 1.6 percent in 2022, which was below the 2022 state rate of 2.1 percent (see Table E20 in Appendix E).

- The dropout rate in Medford was above the state rate by 0.2 percentage point for Asian students, equal to the state rate for White students, and below the state rate for every other student group with reportable data.

Leadership and Governance

The superintendent of Medford is Dr. Marice Edouard-Vincent, who was appointed superintendent in 2018. The central office leadership team includes three assistant superintendents as well as a director of student services. These district officials, particularly the superintendent, work closely with the elected school committee members through their oversight of the district. The school committee has seven members, each serving a two-year term. The mayor of the city currently serves as the chair of the school committee. The school committee works in partnership with Medford's district administrators and community leaders to uphold laws pertaining to education and regulations of the Massachusetts Board of Education. As outlined in the *Rules of the School Committee 2022-2023*, the school committee aspires to meet the needs of all students and their achievements. The school committee works closely with the superintendent to understand the operation and implementation of policies and procedures and to facilitate communication to students, families, and the community.

Dr. Edouard-Vincent receives support from a team of district-level central administrators, who work closely together to support initiatives aligned with and guided by Medford's strategic plan, known as ACES, which prioritizes achievement, collaboration, equity, and support throughout the district. The strategic plan was developed during a recent 18-month period and guides all school improvement plans. The district has focused on renewing existing policies and systems to improve DEI efforts in the district, which aligns with the strategic plan.

Table 2 summarizes key strengths and areas for growth in leadership and governance.

Table 2. Summary of Key Strengths and Areas for Growth: Leadership and Governance Standard

Indicator	Strengths	Areas for growth
School committee governance		■ Clarification and documentation of roles, procedures, and processes for decision making
District and school leadership	■ The superintendent and the district leadership team work together closely to implement the district's strategic plan. ■ District and school leaders demonstrate instructional leadership by focusing on improving teacher practice and student learning outcomes.	■ Strained relationship between district leadership and the teachers' union
District and school improvement planning	■ School improvement plans align with the district strategic plan, while addressing school-specific needs and outcomes. ■ The district strategic plan emphasizes instructional improvement to address achievement and opportunity gaps.	■ Process for developing and revising the strategic plan, including monitoring progress toward each strategic objective
Budget development	■ School leaders have discretion to make spending decisions during the school year.	■ Adjusted timeline for budget approval

School Committee Governance

The school committee collaborates with district leaders to uphold Massachusetts laws and regulations, including hiring and evaluating the superintendent, overseeing the budget, and overseeing school policy. The mayor of the City of Medford currently serves as the chair of the school committee. Elections for membership in the school committee occur concurrently, with all members up for election at the same time. Current members shared that during the past year, much of the focus of meetings and planning was revising past procedures and policies, some of which date back decades. Members described how recent updates to policies and procedures have been successful in decreasing the average length of meetings, which historically lasted more than five hours but have been reduced to about three and a half hours currently. Still, members felt that school committee meetings frequently address more than the required content, contributing to longer meetings than truly necessary. In addition to full school committee meetings, all school committee members participate on multiple subcommittees, designed to focus on key topic areas, including behavioral health and special education; building and grounds; curriculum, instruction, assessment, and accountability; DEI; family engagement and communication; personnel and budget; rules and policy; strategic planning; and superintendent evaluation.

Although Medford's strategic plan guides the work of the school committee, district leaders described a lack of clarity on the roles, responsibilities, and procedures of the committee. This lack of clarity was noted both by school committee members regarding internal roles and procedures, and by community members throughout the City of Medford. To address this lack of clarity, the school committee recently adopted a large set of rules and procedures. School committee members indicated that prior to this adoption of rules and procedures (of which there are nearly 100 in total), there were none. In addition, district leaders also described a lack of clarity in the community about the real role of school committee. For example, they felt that it was not commonly acknowledged that school committee members – as publicly elected officials – are accountable to the voters and report to the community, as opposed to the mayor or the city council. Together, this lack of common understanding about and within the school committee highlights an area for growth for the committee to develop clear documentation of roles, procedures, and processes to support decision making.

Minutes from the School Committee's Evaluation subcommittee meeting on February 16th, 2023 are publicly available on the district's website, and describe recent changes to the process of evaluating the superintendent to align with DESE's guidelines. The minutes indicate that Dorothy Presser of the Massachusetts Association of School Committees (MASC) attended a retreat with the school committee to present about the superintendent evaluation process. Following the retreat, the school committee approved multiple changes to the evaluation process, including the formation of a new evaluation sub-committee. Using the evaluation template provided by DESE, this subcommittee aggregates feedback from committee members to present back to the full committee. The superintendent's Evaluation Report was discussed at the June 28th, 2023 school committee meeting, and is publicly available on the districts' website. Results indicate that the school committee evaluated the superintendent's performance as "Proficient" across all four standards.

Student representatives also participate in school committee meetings and are encouraged to share their thoughts and feedback. District leaders described some challenges to this process following

changes in leadership but noted that they have since been reinstated. They also noted that to encourage more student participation, school committee members are working on a policy to include designated time on the agendas for student representatives to present. In addition, district leaders noted that the current policies on public participation in school committee meetings allow any student to provide input and feedback on district practices and policies.

District and School Leadership

Dr. Edouard-Vincent receives support from a team of district-level central administrators, including an assistant superintendent for enrichment and innovation, an assistant superintendent of academics and instruction, an assistant superintendent for finance and operations, and a director of student services. Across multiple focus groups, staff described how the superintendent and the district leadership team work closely together to implement Medford's strategic plan (ACES, described in more detail in the District and School Improvement Planning section). The district leadership team has developed schedules that allow for regular collaboration for both academic and operational needs throughout the district. Multiple staff also described changes to leadership structures that should support district priorities, such as the recent transition to a single assistant superintendent of academics and K-12 curriculum directors to support instructional and curricular cohesion. The close collaboration between the superintendent and district leadership team is a strength for the district.

District and school leaders demonstrate instructional leadership by focusing on improving teacher practice and student learning outcomes, which is another strength for the district. In recent years, the district leadership team has prioritized the adoption of districtwide student assessments to monitor student learning outcomes, reviewed curricula to ensure alignment with state standards for curriculum frameworks and high-quality instruction, and explored ways to build capacity within the district to support high-quality instructional feedback through the professional evaluation system. The subsequent sections of this reports have additional information on each of these priorities. Embedded in this focus on improving teaching and learning is the district's commitment to DEI. The district leadership team has intentionally incorporated DEI throughout their initiatives, and staff at various levels recognized this district priority. For example, district practices related to examining student performance and assessment results, reviewing curriculum and instruction, and completing teacher and administrator evaluations all reflect considerations related to DEI. In addition, school and district leaders have also utilized case studies during professional development opportunities to examine DEI in school and district practices and foster conversations among educators.

Across multiple focus groups, staff described a strained relationship between the teachers' union and district leadership, including the school committee. This strained relationship is an area of growth for the district. In 2022, the teachers' union passed a vote of "no confidence" on the school committee, and the district narrowly avoided a strike. Union members interviewed described that some structures, such as the Joint Labor Management Committee, which had previously provided support in navigating tensions between the district and the teachers' union, had become unproductive in mitigating tension. However, union representatives noted that with recent changes in district leadership, they hoped that relations overall would see improvement.

District and School Improvement Planning

The district leadership team, which includes school leaders, collaborated for 18 months to redevelop the strategic plan for Medford, called ACES. Multiple district leaders shared the importance of aligning practices with the district's strategic plan and DEI. Budget-related decisions and resource allocation also align with the strategic plan.

Throughout focus groups, building- and district-level staff described familiarity with the strategic plan, and noted that school- and district- level meetings frequently refer back to the strategic plan. For example, one school leader remarked "that [ACES] is our key guidebook that we've been using as we've been moving forward throughout the district." Staff districtwide also described a weekly memo from the senior leadership team that provides updates on each objective of the strategic plan. Even with much evidence that the strategic plan is used to align initiatives across the district, there is no formal plan for evaluating the districts' progress in meeting priorities/goals listed in the strategic plan which is an area of growth for the district.

School leaders design their school improvement plans in collaboration with their school councils, and each school's improvement plan aligns with ACES. Each school improvement plan includes measurable outcomes associated with each goal. School leaders also described the ways in which their school improvement plans are designed specific to school level needs and outcomes. For example, while both middles schools' improvement plans prioritize students' social emotional well-being, one includes action steps related to professional development and school wide initiatives, while the other discussed the physical space in the building and the school community's commitment to increasing access to the library. The alignment between school improvement plans and the district strategic plan is a strength of the district.

Throughout interviews and focus groups, the consensus among district staff was that the existing strategic plan includes meaningful areas of focus for the district and effectively supports collaboration and systemic improvement. However, it was not apparent from interviews or a review of documents that a formal process exists for developing, updating, and revising the district's strategic plan. To support the sustained use of the strategic plan to guide collaboration and systemic improvement, an area of growth for the district is to formally document the process for developing and revising the strategic plan, including a formal plan for monitoring progress toward each strategic objective.

Budget Development

The budget development process begins with a survey distributed to all administrators within the district to solicit feedback and information for the development of the district's budgetary priorities. Respondents are asked to focus on three areas: personnel, curricular materials and supplies, and professional development, and align any priorities with ACES. The school committee provides feedback on the results from the survey, which includes suggestions and recommendations from the administrators on ways to prioritize funding and allocate the budget. The comptroller and the assistant superintendent for finance and operations work together to facilitate the budget development process, presenting iterations of the budget to the school committee, which typically

begin at the end of April and continue through May. Approval of the school budget typically occurs toward the end of June, based largely on budget timelines held for the city overall.

In 2021, TMSolution Inc. (TMS) conducted an operational review of the practices of Medford's business and finance departments. In relation to budget development, TMS found that the budget process begins too late in the school year: preliminary budget meetings occurred in March, and school budgets were approved at the end of June. This timeframe did not provide adequate time for informed discussion, advocacy, and iterations of the cycle to develop the budget. Likewise, district staff across focus groups highlighted the timing of the budget process as a barrier to key district priorities, such as recruiting and hiring diverse staff. Interview data and publicly available budget documents suggest that no changes were made in terms of the timeline of the budget development process. Like findings from TMS' operational review, budget documentation illustrates that the first public budget meeting occurs in early May, with the final budget approval by mid-June. Together, this evidence supports an area for growth for the district to adjust the budget approval timeline.

Clarity exists across the community and the school committee on the importance of this alignment between budget requests and the strategic plan. The school committee expressed appreciation for the level of transparency on the budget between the superintendent and the committee, which has allowed the committee to gain a full understanding of the process and needs of the district. School leaders expressed appreciation for the autonomy provided to principals for decision making in staffing, scheduling, and budgeting, which is a strength for the district. School leaders largely agreed that they had a great deal of autonomy with hiring, scheduling, and spending decisions. In addition to autonomy, they noted a great deal of collaboration across school leaders; for example, each elementary school recently adopted a block schedule to ensure sufficient instructional time for core content areas across all elementary schools.

Recommendations

- In collaboration with its school committee, the district should work to better delineate and document its roles, procedures, and processes for decision-making.
- The district should collaborate with the teacher's union to repair their relationship, in order to promote a supportive work environment for staff.
- The district should develop guidelines and a process for revising its strategic plan.
- Where feasible, the district should move up its budgeting timeline to allow for better planning and for early hiring of diverse instructional staff.

Curriculum and Instruction

According to Medford's website, the mission of the elementary and secondary schools is to "provide a nurturing and stimulating environment" with an instructional focus that "promotes the ability to think critically, clearly, and to communicate effectively as well as support social emotional health." Medford offers standards-aligned curricular materials in digital literacy, ELA, fine arts, health and physical education, library, mathematics, science, social studies, and world languages.

Curriculum directors at the district level lead the curricular review process for the district. School-based educators participate in the decision-making process when selecting curricula. The role of the curriculum director was recently redesigned to focus on K-12 alignment within each content area, which will contribute to supporting vertical alignment of the district's curricula.

Table 3 summarizes key strengths and areas for growth in curriculum and instruction.

Table 3. Summary of Key Strengths and Areas for Growth: Curriculum and Instruction Standard

Indicator	Strengths	Areas for growth
Curriculum selection and use	■ The district has a strong capacity to support instructional alignment across all schools through K-12 curriculum directors. ■ Teachers participate in curricular selection processes and provide regular feedback throughout implementation. ■ There is clear alignment between the curriculum selection process and district's strategic plan, including an emphasis on DEI.	
Classroom instruction	■ The Instructional Academic Team (IAT) structure at high school level brings together school staff with district level curriculum directors. ■ The district has increased consistency of access to rigorous grade level curriculum and instruction at the elementary level.	■ Improved structures to support differentiating instruction to support all students
Student Access to Coursework		■ Review effectiveness of policy changes related to advanced coursework access

Curriculum Selection and Use

Medford offers standards-aligned curricular materials in digital literacy, ELA, fine arts, health and physical education, library, mathematics, science, social studies, and world languages. For ELA, Medford uses Journeys (2014) for Grades K-5, which is not rated on CURATE,[5] and Enhanced Core Reading Instruction (ECRI) Grades K-2, which also is not rated on CURATE. In addition to Journeys and ECRI, the district uses supplementary fictional and informational texts. The ELA curriculum for

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[5] CURATE: CUrriculum RAtings by TEachers. See https://www.doe.mass.edu/instruction/curate.

Grades 6-12 is district developed (and therefore not rated on CURATE) using a variety of fictional and informational texts. For all grades, the district is conducting a comprehensive curriculum review of three new ELA programs. This review is being conducted in partnership with Hill for Literacy, a local nonprofit that consults with schools and districts on pedagogy and evidence-based literacy instructional strategies.

For mathematics, Medford implements Investigations 3 (2017) for Grades K-5, which is rated by CURATE as "partially meets expectations." For Grades 6-8, Medford uses Illustrative Math (2017), which was adopted in 2019 and rated as "meets expectations." The Houghton Mifflin Harcourt (HMH) Algebra 1, Geometry, Algebra 2 (AGA) Series (2015) is used in Grades 9-12, but it is not rated on CURATE. As presented to the school committee on February 6th, 2023, Medford is currently piloting Integrated Mathematics Pathways at the high school level which replace the traditional high school mathematics course of study (e.g., Algebra 1, Geometry, and Algebra 2) with three courses that attend to Algebra, Geometry, and Probability and Statistics each year.

For science in Grades K-5, Medford implements the FOSS Core Science Curriculum, which is not rated on CURATE. Grades 6-8 use STEMscopes Science Program, which also is not rated on CURATE. In Grades 9-12, Medford uses district-selected, subject-based textbooks for biology, chemistry, and physics, which are not rated on CURATE.

For history and social science in Grades K-8, Medford uses a variety of curricular resources, including Savvas myWorld Interactive and supplementary primary and secondary sources, which are not rated on CURATE. For Grades 9-12, Medford also uses a variety of resources, including an HMH world history textbook and other primary and secondary sources not rated on CURATE.

The district has a strong capacity to support instructional alignment across all schools through K-12 curriculum directors, a recognized strength of the district. Curriculum directors within each content area provide support for curriculum and instruction throughout all schools and grade levels. Previously, curriculum director roles focused on secondary levels (middle and high school), with two separate assistant superintendents for the elementary and secondary levels. This year, the district shifted its central office structure to include a single assistant superintendent for academics and redesigned the curriculum director role to span K-12. Multiple district staff described this shift as supportive of instructional alignment and equity across each school in the district. Curriculum directors explained that a large part of their role is to coordinate the review, selection, and implementation of new curricular resources. They also described collaborating with district and school leaders to conduct learning walks and classroom observations to improve instructional equity.

Teachers participate in the curricular selection process and provide regular feedback on curricular implementation which is a strength of the district. District staff across multiple focus groups described regular participation of teachers in the curricular selection process. The curriculum directors emphasized the importance of involving teachers, as well as students, when implementing new curricula, referring to the process as a "collaborative team effort." They also noted the efforts to "engage teachers in every curriculum shift," and described opportunities at both the school and district level to regularly hear feedback from instructional staff to support implementation and support. For example, curriculum directors attend grade level and department meetings, and support professional development to support curriculum implementation at the school and district levels.

Across multiple focus groups, district staff also described alignment between the curricular selection process and the district's strategic plan, including an emphasis on DEI, which is a strength of the district. Curriculum directors described ways that they have systematized their reviews to include examining the representations and cultural relevance of any curricular resources being reviewed.

Classroom Instruction

Four observers, who focused primarily on instruction in the classroom, visited Medford during the week of April 3, 2023. The observers conducted 81 observations in a sample of classrooms across grade levels, focused on literacy, ELA, and mathematics. The CLASS protocol guided all classroom observations in the district. These observations used the three grade-band levels of CLASS protocols: K-3, Upper Elementary (4-5), and Secondary (6-12).

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

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

When conducting a 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) indicates that the dimension was never or rarely evident during the visit. A rating of 3, 4, or 5 (middle range) indicates that the dimension was evident but not exhibited consistently or in a way that included all students. A rating of 6 or 7 (high range) indicates that the dimension was reflected in all or most classroom activities and in a way that included all or most students.

In Medford, 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 at individual dimensions within those domains. The full report of findings from observations conducted in Medford is in Appendix B, and summary results are in Tables 17, 18, and 19 in this appendix.

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

- **Emotional Support.** Ratings were in the middle range for all grade bands (5.5 for K-5, 4.7 for 6-8, and 4.6 for 9-12).
- **Classroom Organization.** Ratings were in the high range for all grade bands (6.2 for K-5, 6.7 for 6-8, and 6.6 for 9-12).

- **Instructional Support.** Ratings were in the middle range for all grade bands (3.5 for K-5, 3.6 for 6-8, and 3.9 for 9-12).
- **Student Engagement.** Ratings were in the middle range for all grade bands (5.2 for K-5, 5.2 for 6-8, and 4.9 for 9-12).

Overall, across all grades, instructional observations offered mixed evidence of strong emotional support, instructional support, and student engagement. Instructional observations suggest strong classroom organization across all grade levels.

District leaders indicated that each school has an Instructional Leadership Team (ILT), but that practices, protocols, and effectiveness is inconsistent across buildings. Currently, ILTs are facilitated by school leaders. Multiple leaders in the district noted that the ILT at the high school (which is referred to as the Instructional Academics Team or IAT) was a particular strength among the ILT structures, because district level curriculum coordinators are part of the team and participate in meetings. This structure provides regular opportunities for collaboration and discussion on classroom instructional practices, pedagogy, and curricular implementation. District leaders noted a desire for more consistency across ILTs, including regularly including curriculum directors on the team, as the high school does.

The district has recently increased the consistency in access to rigorous core curricular resources across each elementary school, which is recognized as a strength of the district. The district's goal to "Provide equal access to academics, support, and enrichment" is included as an initiative on the strategic plan related to equitable learning opportunities. In focus groups, school leaders, district staff, and teachers described recent changes to increase consistency across all elementary schools. Examples include the recently adopted mathematics curriculum, the implementation of strategic supports for social-emotional learning (described later in Student Support), an ongoing process to select a new CURATE rated reading curriculum to replace the current program (which is not CURATE rated) and implementing consistent instructional schedules across all elementary schools. The district provides opportunities for school leaders from each elementary school to come together to support alignment, as well as professional development and collaboration opportunities for teaching staff from each elementary school.

Throughout focus groups, however, district staff repeatedly highlighted concerns related to differentiating supports for all learners. Feedback from educators particularly identified concerns for students with disabilities and ELs. Some concerns were structural in nature. For example, district staff raised concerns about special education instructional group sizes, placement decisions, and programming for students in substantially separate classrooms, which contributed to challenges in meaningfully differentiating supports for students. Similarly, several educators described the need for more staff to support ELs in the district, despite the district having hired additional EL staff and implementing a co-teaching model to support EL services. Staff also highlighted equity concerns because all ELs are housed within one of the two middle schools. Several staff also discussed capacity concerns related to the middle school arrangement, given that the district's EL population is growing and one building currently has no EL support staff available. Moreover, educators raised concerns about insufficient staffing to support meaningful intervention services which could decrease the number of special education referrals. While district officials emphasized their strong

belief on mindsets around strong and effective Tier 1 instruction, many educators in focus groups focused on something else: an issue around instructional models, resources, scheduling, interventions, training, and progress monitoring. This tension between district- and building-level staff highlight an area for growth for the district about structures related to differentiating support for all learners.

Student Access to Coursework

District leaders described several key initiatives designed to support students' access to rigorous learning experiences and a variety of course offerings. For example, the schedule for both middle schools include structured opportunities for career exploration and the district utilizes the Naviance online platform (along with other websites and resources) to support students' individual exploration and interests. Since the merger of the high school with the vocational high school, all students now complete a rotation for career technical exploration with fine arts, which includes art and music. The high school is currently piloting an integrated mathematics pathway, which is designed to increase students' college and career preparedness, while also building in choice for students' mathematics coursework. In addition, curriculum directors described an effort to expand access to high interest elective courses, including a recently added "statistics in sports" course.

District and school leaders also described a recent examination of entrance policies for honors and Advanced Placement (AP) courses, with a goal of increasing access. For example, one school leader remarked. "There was a time where you had to earn a certain grade to get into an honors or an AP and I think we've shifted through the years to give more students opportunities." Anecdotally, district and school leaders had initially felt that these changes were matched with increased participation in advanced coursework. However, DESE data from 2022 (Table E21) reveals a decrease in the percentage of students completing advanced coursework since 2021, and an overall completion rate that is below the state average. Together, this evidence suggests that an important area for growth for the district is to examine the effectiveness of policy changes related to advanced coursework access.

Recommendations

- The district should consider hiring additional support specialists and invest in additional training of current staff to allow students in all grades to receive appropriate services to meet their individualized education program (IEP) goals and ensure shared responsibility for inclusive instruction.
- The district should review the efficacy of its policy changes around improving access to advanced coursework, and based on the results of that review, make further adjustments to address gaps in access.

Assessment

Medford collects and uses multiple sources of data throughout the year. The district administers statewide assessments, such as the MCAS, as well as other comprehensive assessment systems, such as NWEA's MAP, to monitor student progress toward state proficiency standards and benchmarks. Districtwide assessments align across grade levels and subject areas.

The district leadership team provides presentations to the community regarding district- and school-level student assessment results. They support schools' capacity to use data to help instructional staff improve their practice. To sustain their efforts to coordinate data-driven instructional support, the district hired an executive director of data and reporting.

Table 4 summarizes key strengths and areas for growth in assessment.

Table 4. Summary of Key Strengths and Areas for Growth: Assessment Standard

Indicator	Strengths	Areas for growth
Data and assessment systems	■ The district collects multiple sources of data to provide a comprehensive picture of student, school, and district performance. ■ Formative assessment practices align across grades and subject areas.	
Data use		■ Improved systems and structures that support the regular use of data to inform decision making at the classroom level
Sharing results		■ Consistency in the communication of student performance and progress to parents and families

Data and Assessment Systems

Focus group responses and reviewed documents reveal that Medford collects multiple sources of data to provide a comprehensive picture of student, school, and district performance, which is a strength of the district. Across focus groups, staff described various assessments that inform decisions related to instructional strategies. For example, the district reviews MCAS data and administers NWEA's MAP computer-adaptive assessments at the beginning, middle, and end of the school year. A districtwide presentation shows that MAP results provide teachers with information to help them deliver appropriate content for each student and determine their academic growth across time. The use of a common assessment platform across all grade levels and two key content areas (ELA and mathematics) helps support alignment of formative assessment practices across grades and subject areas, another recognized strength of the district.

Based on the 2022-2023 Assessment Inventory, K-5 students complete benchmark HMH assessments in ELA, Investigations 3 unit assessments in mathematics, and FOSS benchmark assessments in science. Moreover, middle and high school students take district-developed common midterm and final assessments as well as unit and topic assessments in ELA, mathematics, and social studies. Middle school students also complete STEMscopes unit assessments in science. In addition, the language acquisition team meets at the beginning and end of the school year to assess the development of multilingual learners by analyzing ACCESS scores.

Data Use

District documents illustrate how MCAS and NWEA MAP performance data are regularly reviewed and shared with the school committee. Documents reviewed provided evidence of multiple presentations to both school committee and families about the district- and school-level academic performance results (e.g., MCAS, MAP), highlighting instructional action steps across all content areas measured. Across focus groups, district leaders spoke about extensive training provided to incorporate multiple sources of data into teacher observations and evaluation to support high-quality instructional feedback, which is described in more detail in the Human Resources and Professional Development section of this report.

A document describing Medford's Data Inquiry Cycles suggests that the district aims to "determine the districtwide systems and structures that support continuous academic and social improvement" by engaging in activities that provide clear and accurate information about data collection, analysis, and use, including setting expectations for and communicating the importance and purpose of data during staff meetings. District documents describe that school leaders facilitate department or grade-level data inquiry cycles using standardized protocols and templates for reviewing data and engaging teachers in data-focused coaching conversations during common planning time (CPT).

However, feedback from teachers revealed mixed opinions regarding the implementation of these structures. On one hand, multiple staff across focus groups described analyzing data during department meetings to "see where [student] growth is, [and] where deficits may lie," helping teachers identify opportunities for differentiation and/or intervention in the classroom. One school staff member added, "Sometimes, we bring data from MAPs or other assessments [during CPT meetings] to see areas where [students] need more support; . . . it is very informative and gives us a broad understanding [about] what is going on in the grade." However, focus group responses suggested that the consistency with which school staff uses student assessment data for making schoolwide and classroom instructional decisions varies from school to school. Relatedly, school leaders noted that although they have provided some building-based professional development for teachers around data use, they felt that this was an area of growth for some teachers and teams. For example, one school leaders remarked "We do try to have our data discussions at our CPTs, but there's a lot of other issues that have to come up too. So it doesn't happen as regularly as I would like for it to." Together, this feedback highlighted an area for growth for the district in improving systems and structures that support the regular use of data to inform decision making at the school and classroom level.

To address this need, Medford hired an executive director of data and reporting, whose role is to support the district's effort to coordinate data-driven instructional strategies. The district hopes that this increased district capacity will support districtwide practices around data use. During focus groups, district staff suggested that, in previous years, core subject (i.e., humanities, mathematics, science) department heads facilitated district-level data use. Although this approach allowed each department head to identify improvement priorities within their specific content area, it prevented them from recognizing trends in student performance across subject areas, student groups, and grade levels while also coordinating support for instructional improvements. Focus group respondents noted that they believe that the executive director of data and reporting will support the district in aligning data practices and procedures throughout the district.

Sharing Results

According to Medford's 2022-2023 Data Inquiry Cycles Structure, the district's goal is to "establish frequent, reliable communication structures." This involves developing a shared, districtwide calendar of assessments and data analysis events, establishing consistent structures for communication that allow staff to share individual student data with families, and disseminate information to school community members. In addition, according to a district presentation to families on November 29, 2022, a family report summarizing student performance on MAP assessments is sent home with each report card period, and the elementary-level results are discussed during parent-teacher conferences.

Despite districtwide structures and expectations for communication, family focus group respondents suggested that the actual quality and frequency of communication that parents and families receive from their child's school regarding student progress still varies from school to school. For example, some parents described regular report card meetings, whereas others indicated that meetings after report cards occurred only by parent request. While some parents described bright spots in terms of communication in the district, many expressed frustration and particularly highlighted inconsistencies between buildings and teachers. For example, one parent shared "I was amazed at how different it was between elementary and middle school for us. But again, it sounds different for other schools. So I think it is just dependent on the principals and the teachers." Together, this feedback highlights an area for growth for the district in ensuring consistency in sharing information about student progress with families.

Recommendations

- The district should aim to incorporate all student service providers, such as ESL specialists or interventionists, in data-team meetings, so that all staff working with a student can reflect on student data and align on strategy.
- The district should set norms and clear expectations for schools around the frequency and quality of communication to families about student progress.

Human Resources and Professional Development

The Finance and Operations Office, under the leadership of the assistant superintendent for finance and operations, oversees Medford's human resources department. The district has designated central office staff to support both human resources and professional development throughout the district. There is clear agreement that the district prioritizes efforts to recruit and retain diverse candidates in Medford, as noted by nearly all interview respondents.

Medford staff have a comprehensive professional development plan, which clearly aligns with the objectives of the district's strategic plan (ACES). The district seeks to provide high-quality professional development opportunities for all staff, as advised by the Professional Development Advisory Council (PDAC).

Table 5 summarizes key strengths and areas for growth in human resources and professional development.

Table 5. Summary of Key Strengths and Areas for Growth: Human Resources and Professional Development Standard

Indicator	Strengths	Areas for growth
Infrastructure		■ Recruitment platform, hiring process, and associated training
Recruitment, hiring, and assignment	■ The district has adopted specific strategies for recruiting diverse candidates.	■ Examine equity of staffing assignments
Supervision, evaluation, and educator development	■ The district invests in professional development for evaluators to increase equitable practices and effective feedback through the evaluation process to improve teaching and learning. ■ The PDAC includes representation from central office and school-based educators to develop a comprehensive professional development plan for the district.	■ Increased inclusion of areas for improvement in teacher and administrator evaluations
Recognition, leadership development, and advancement		■ Increased opportunities for educator recognition, leadership development, and advancement

Infrastructure

Medford has a director of human resources who reports to the assistant superintendent of finance and operations. The director of human resources supports the district in posting job openings on multiple platforms, coordinating substitute coverage, and engaging in general recruitment efforts related to the district's goal of recruiting and hiring a more diverse workforce. These efforts will be

addressed in the next section. Once posted on the hiring platform, principals can then select candidates for interviews to fill the positions. Members of the district leadership team complete additional interviews with candidates before approving the hiring of staff. During the final vetting, district leaders emphasize the district's priorities about equity and establish understanding of the district's strategic plan.

School leaders agreed that the specific platform that the district uses for applications can sometimes be cumbersome for both applicants and school leaders to navigate. One school leader described difficulties with navigating through the platform to complete the entire process, and shared he has received feedback from staff who indicate that the process is "cumbersome". They also described instances where candidates have indicated that they found it easier to "move on to another district" than complete the hiring process through the platform. District officials, on the other hand, reported that they view the system as a strength, though they acknowledge a role for increased and enhanced staff training in use of the tool. Together, the cumbersome hiring platform, process, and associated training is an area for growth for Medford.

Recruitment, Hiring, and Assignment

The district's strategic plan prioritizes recruiting and hiring diverse candidates for Medford. Nearly all interview respondents identified the importance of recruiting and retaining diverse staff as a priority for the district and the continued need to focus on such efforts. The district has adopted specific strategies for recruiting diverse candidates. The district partnered with neighboring school districts (including Chelsea, Everett, Revere and Malden) to hold diversity career fairs. In addition, the district leveraged a specific platform designed to recruit diverse educators. The district also partnered with the city's director of DEI to collaborate on specific recruitment strategies. The identification of specific strategies for recruiting diverse candidates is a recognized strength of the district.

Although the district has prioritized the recruitment of diverse staff, multiple district staff expressed that the timing of the budget development and approval process (see the Leadership and Governance section) has negatively impacted the district's ability to recruit and hire a diverse workforce. According to multiple staff interviewed, the late timeline for budget development and approval impacts the posting of teaching positions and ultimately limits the potential size and diversity in the pool of candidates, many of whom may have already been hired by other schools or districts.

Across focus groups, several respondents expressed a desire for more staffing. Many school-based staff felt that additional specialists for special education and EL support are needed. District- and school-level staff also described operational challenges that they believed required additional personnel to address, including adults to support safe environments in the hallways and bathrooms. District staff described creating positions this year in response to specific incidents at the high school and highlighted a contractual requirement of two uninterrupted prep periods at the high school level, which they believe contribute to disproportionate staffing levels across schools. Together, this feedback highlights an area for growth for the district to further address the equity of staffing assignments.

Supervision, Evaluation, and Educator Development

In an effort to improve the evaluation system, Medford has partnered with Ribas Associates and Publications Inc. to offer intensive professional development for evaluators, which is a strength for the district. This investment is geared toward increasing equitable practices and effective feedback throughout the evaluation process to improve teaching and learning. School and district leaders emphasized the importance of this professional development that brings together all evaluators to reflect on the structure, content, and quality of evaluations and feedback. District staff described a standard format for writing feedback that the group is utilizing (SJEIR: Statement, Judgement, Evidence, Impact, Recommendation). They also referenced a cross walk that was developed which brings together what Ribas refers to as "high leverage practices" with the districts' existing "core actions" or instructional priorities. District leaders spoke highly of this resource, which helps focus their evaluation and feedback on concrete strategies for improving instructional practice.

District records suggest that teacher evaluations are consistently uploaded to TeachPoint. A review of the educator evaluation files indicated that teachers received ratings and feedback on their performance based on the Standards and Indicators of Effective Practice. Simple random sampling was used to select the sample of 10 percent of 113 professional teacher status teachers (12 teachers) who were scheduled for summative evaluations in 2021-2022. All evaluations were marked as complete and not missing the required components, including a rating for each standard or an overall rating. Nearly all evaluations (11 of 12) included multiple sources of evidence, such as observations, student work samples, or other evidence to support progress toward student learning goals, professional learning goals, standards, and indicators. Nearly all summative evaluations (92 percent) included feedback for each standard, and a majority of the evaluations (83 percent) included feedback identifying strengths, whereas only three evaluations (25 percent) included areas of improvement. The review of evaluation documents indicated that nearly all educators were developing both student learning (92 percent) and professional practice (92 percent) SMART (specific, measurable, achievable, realistic, and timely) goals.

Administrator evaluations also are stored using TeachPoint. Eleven administrators were due for a summative evaluation at the end of 2021-2022, and all evaluations were available for review. A majority of the summative evaluations (73 percent) were complete with performance ratings and an assessment of progress toward goals. Of the summative evaluations reviewed, a majority of the evaluations (82 percent) included student learning and professional practice goals. More than half of the evaluations (64 percent) included multiple sources of evidence to assess performance on summative evaluation standards. Most of the summative administrator evaluations reviewed (73 percent) included evaluator comments with specific, actionable feedback identifying each administrator's strengths, whereas only one evaluation reviewed included areas for improvement.

The district is in the second year of "an intensive" supervision and evaluation training program. They noted that the guidance provided for the evaluation of observations is "very structured and very scientific" and guides staff through offering recommendations geared toward improving instruction and the classroom experience. One staff member described the importance of providing concrete and actionable feedback to teachers through evaluation: "Every single recommendation should provide a specific resource that teachers can go to." Feedback from multiple evaluators across different focus groups highlighted several ways in which current practices in evaluation differ from

practices used during 2021-2022 because of this ongoing training. Still, data from the review of evaluation records highlights an area for growth for the district to continue their efforts to include areas for improvement in teacher and administrator evaluations.

The director of professional learning and student assessment convenes a PDAC, which consists of six members of the Medford Teachers Association and six members of the district's administration. This committee surveys district staff about professional learning needs and interests and collaboratively designs professional development plans for the year. The District Professional Development Plan (2021-2023) details the council's mission and guiding principles, as well as the clear alignment of the plan to the district's strategic plan (ACES).

During this past academic year, the themes for professional development and learning activities were (a) supporting students with trauma, (b) executive functioning, (c) re-licensure (for EL and special education teachers), (d) strategies for students with dyslexia, and (e) student equity. Based on these themes, developed in response to a districtwide survey, the district offered the following programs: (a) Responsive Classroom, (b) Restorative Practices, (c) EL Strategies, (d) Dynamic Indicators of Basic Early Literacy Skills, (e) ECRI, and (f) Cultural Responsiveness and Student Equity. In focus groups, feedback from staff referenced this committee and plan when discussing professional development provided throughout the district, Together, this evidence highlights the PDAC as a strength of the district.

Medford provides a mentoring and induction program for all new teachers in the district, which the director of professional learning and student assessment oversees. Mentor teachers meet with new teachers once or twice per month throughout teachers' first year. In the year following, new teachers continue meeting with their mentor teacher once per month for mentorship and support. In focus groups, teachers expressed mixed opinions about the mentoring program. Some recently hired staff expressed satisfaction with their experience in the mentoring program, whereas other staff raised concerns about the true capacity of the program. For example, multiple teachers indicated that the mentor teachers are often assigned to several mentees, because the district has difficulty recruiting staff to serve as mentors. Staff also highlighted the small stipend as a challenge to recruiting mentors.

Recognition, Leadership Development, and Advancement

To support staff and as stated in the District Professional Development Plan (2021-2023), teachers are eligible for reimbursement of tuition and fees if they choose to pursue continued education, with a maximum reimbursement of $1,000 per individual per year. Medford also is a premium member of a professional development collaborative (formerly known as the Salem State Collaborative Project), which provides district courses and workshops at a free or low cost to Medford staff.

Through their evaluation work, central office staff are currently developing criterion for equitably recognizing excellence in teaching. Currently, teachers are recognized more informally by principals and directors during regular meetings. According to professional development staff, teachers may be recognized as a strong teaching "model." New teachers may be sent to observe their classroom, as they model exemplary classroom management, connection with students, and/or content knowledge.

Similarly, there are some opportunities for teachers in Medford to exercise leadership. Some elementary and high school teachers noted that opportunities such as leading in the Center for Citizenship and Social Responsibility program or serving on school-based teams (e.g., student support team [SST]) provide them with leadership experience. In general, staff described minimal recognition, leadership, and advancement opportunities. The consensus among districts and school level staff was that increased opportunities for recognition, leadership development, and advancement was an area for growth for the district.

Recommendations

- The district should diagnose challenges around its hiring platform and determine whether a different system or improved training would reduce technical issues and the risk of losing candidates.

- The district should review its process for assigning staff to buildings – particularly assignments that occur midyear – to ensure proportionate assignment across schools.

- The district should continue its effort to implement a greater level of critical feedback and areas for improvement in its evaluations for teachers and administrators, in alignment with its new training program.

- The district should develop more formal opportunities for staff recognition, leadership development, and advancement.

Student Support

Medford highlights the importance of and prioritizes increasing school capacity to create a safe and supportive learning environment for all students. Although consistency in implementation varies by school, the district adopted Responsive Classroom and the Nexus program across elementary classrooms plus a Restorative Justice approach to behavior management in the middle and high schools. The district launched a districtwide vision for MTSS (i.e., response to intervention) by developing protocols and procedures to guide practice and promote consistent implementation districtwide. However, feedback across groups suggests that implementation of these protocols and procedures is minimal, and inconsistencies across buildings remain.

The district facilitates home-school communication to foster strong partnerships using different methods, including TalkingPoints, an application which makes communication accessible by providing information in families' home languages. Nevertheless, district staff recognize consistency in family-school communication as an improvement area and suggest a need to ensure staff capacity for facilitating timely, accurate, and equitable processes for the two-way exchange of ideas and information.

Table 6 summarizes key strengths and areas for growth in student support.

Table 6. Summary of Key Strengths and Areas for Growth: Student Support Standard

Indicator	Strengths	Areas for growth
Safe and Supportive School Climate and Culture	■ The district strategic plan prioritizes safe and supportive learning environments. ■ The district adopted Responsive Classroom and Nexus programming across all elementary schools.	■ School safety and building consistently strong relationships between adults and students, especially at the high school level
Tiered Systems of Support	■ The district has developed a districtwide vision for student support structures, including SSTs.	■ Low implementation of the district vision for SST practices and protocols
Family, student, and community engagement and partnerships	■ The district increased capacity to support two-way communication in families' home languages through TalkingPoints.	■ Consistency in family-school communication throughout the district

Safe and Supportive School Climate and Culture

Overall, Medford prioritizes the creation of a safe and supportive environment for students. The district strategic plan reflects a commitment to DEI to ensure that schools equitably support all students' safety, well-being, and sense of belonging. Staff identified several examples of how they foster safe, positive, healthy, inclusive, engaging, and welcoming learning environments, including the use of Responsive Classroom and Nexus programming in the elementary schools and the Restorative Justice approach to behavior management in the middle and high schools.

Medford's 2021-2024 Strategic Plan describes a districtwide objective focused on "assess[ing], review[ing] and ensur[ing] a safe and secure teaching and learning environment." It outlines specific initiatives to help implement this objective, such as maintaining and evaluating safety protocols, building and sustaining partnerships with community organizations, and strategically using their finances to improve learning environments. In addition, school improvement plans demonstrate each school's commitment to cultivating a safe, inclusive, and equitable learning environment for students by providing explicit instruction to support students' social-emotional learning; creating a culture that celebrates diversity through school- and community-wide events; requiring and supporting staff participation in cultural competency, DEI, positive behavioral interventions and supports, and social-emotional learning training; and diversifying the selection of books at and extending the hours of operation of the school library. The prioritization of safe and supportive environments in the strategic plan is a strength of the district.

Medford's districtwide approaches to cultivating safe and supportive school climates include cultural celebrations, monthly observances, and inclusive events that represent and honor the diversity of cultures in their local community, such as Black History Month, Women's History Month, Gay-Straight Alliance events, and an "It Gets Better" assembly. Focus group responses and reviewed documents also indicate that district and school staff have dedicated their time to DEI professional development in the past two years, including training focused on antiracist teaching practices as well as understanding and addressing the impact of microaggressions and implicit bias on student success.

Medford also established a universal safety committee, which facilitates monthly meetings with committee members and works with district and school administrators once every quarter. The committee aims to improve school safety, including offering professional development sessions for school staff regarding emergency preparedness and leading discussions on school traffic management (e.g., designating pickup and drop-off zones and integrating speed bumps to ensure speed limit compliance). Relatedly, Medford received instructional observation ratings in the middle range on the Teacher Sensitivity dimension, with average scores of 6.1 for Grades K-5, 5.6 for Grades 6-8, and 5.2 for Grades 9-12. These ratings suggest that most teachers are aware of student needs much of the time, and many students are comfortable with the teachers, share ideas, and ask and respond to questions.

During focus groups, district staff indicated that Medford has adopted and implemented social-emotional learning programming to create safe, inclusive, and equitable learning conditions. For example, the district implemented the Nexus program to mitigate the impacts of the COVID-19 pandemic on elementary students' social-emotional learning. Introduced across all elementary schools, this weekly, 45-minute elective class focuses on not only the social-emotional well-being of students in kindergarten through fifth grade but also the development of their executive functioning

skills by integrating elements of the Michigan Model for Health, the Zones of Regulation, and the core competencies of social-emotional learning. The district also adopted Responsive Classroom at all elementary schools and provides training and ongoing support to teachers and staff to ensure consistent implementation. Several district staff members regarded this as an improvement because the district previously lacked systematic implementation strategies for creating a positive climate for learning. Across focus groups, multiple staff praised the district's increased focus and structure for supporting students' social and emotional well-being. One educator remarked, "It's a change, and it's definitely something that I think has improved our system." The district's adoption of Nexus and Responsive Classroom at the elementary level is a recognized strength of the district.

At the secondary level, focus group responses indicated that Medford's disciplinary measures had shifted away from punitive consequences toward a Restorative Justice approach, which encourages mediation and community building and discourages out-of-school suspensions. To illustrate, a review of district documents reveals that McGlynn Middle School students participate in Community Building Circles—which comprise wellness check-ins, guiding norms, and discussion questions—to help them build trusting relationships and a sense of belonging within the school community.

The classroom observations completed for this district review plus data from the Views of Climate and Learning (VOCAL) student survey provide preliminary evidence related to the effectiveness of the district's initiatives designed to support safe and supportive school climates. For example, instructional observation scores in the high range for the Behavior Management dimension—the average score is 6.5 out of 7 districtwide—suggest that teachers clearly and consistently reinforce the rules and guidelines for behavior. Moreover, results from the VOCAL survey indicate a relatively strong school climate across all school levels and student subgroups, as evidenced by overall school climate scores in the "favorable" range (51 to 70, with a maximum score of 100). More specifically, overall school climate scores based on the responses of Medford students who are in Grade 8, identified themselves as African American/Black, belong to other racial groups, or students with disabilities were meaningfully higher (at least 3 to 4 scaled score points) than the statewide overall school climate scores for the same subgroup of students. Students who identified as Asian revealed an overall school climate score meaningfully lower than the state average.

Despite the relative strengths noted in classroom observations and the VOCAL survey results, themes from focus group and interview feedback across stakeholder groups continued to identify significant needs related to safe and supportive school environments at the high school level. Staff, students, and families consistently raised concerns about both physical and emotional safety. Across multiple interviews, district staff highlighted specific incidents that occurred in the high school this year and described immediate changes made in response to stabilize the school community and increase physical safety. This included hiring additional staff at the high school to support hallway and bathroom monitoring and security. High school students agreed that they could all identify staff with whom they had positive relationships, but they also noted very challenging relationships with others in the building. Across focus groups, students and parents referenced several instances of harassment, bullying, and/or overt biases and expressed dissatisfaction with how the incidents were handled. For example, some students shared instances when teachers reprimanded and/or disciplined them for speaking in a language other than English in classes. Together, this feedback

indicates that school safety and building consistently strong relationships between adults and students continues to be an area of growth for the district, especially at the high school level.

Tiered Systems of Support

Medford provides a tiered system to support the needs of all students by using data-driven decision making to develop appropriate interventions and supports. Information collected through the district review confirmed that each school has an SST that meets with classroom teachers to review student data and develop appropriate intervention plans. Across each school, the process typically involves a teacher referral, a review of student data, the development of a support plan, and a review to ensure that the plan is effective. District leaders described that a central focus of professional development this year was to present a unified vision for SSTs throughout the district; however, feedback from multiple focus groups suggests that implementation of this unified vision remains low.

Medford developed a districtwide vision for student support structures, including SSTs, which is a recognized strength of the district. At the district level, staff described a primary focus on articulating a clear vision for tiered systems of support through professional development and protocol development. This vision builds on high-quality universal instruction, data-driven processes for matching students with evidence-based interventions, and designated time in school schedules to provide interventions that do not exclude students from core instruction (e.g., WIN blocks and advisories). In addition, district staff described using universal screeners to identify students needing additional support. Namely, schools use screening tools included in the Cognitive Behavioral Intervention for Trauma in Schools and Signs of Suicide programs to identify students requiring tiered behavioral, social-emotional, and mental health interventions. District staff also acknowledged the role that community partners play in helping schools provide wraparound services and support (e.g., mental health) to students. This articulated vision provides common vocabulary, structures, and protocols to support a tiered system of support throughout the district.

Although the district has developed systems and structures for providing students with tiered academic and nonacademic interventions, focus group responses suggest that the process is not yet fully implemented with fidelity. Educators across schools agreed that the district's vision for SST was far from a reality in most schools, noting significant variability in support structures across schools. Staff also highlighted that in some buildings, SSTs were not actually meeting as regularly as planned. The poor implementation of the district's vision for MTSS was highlighted by several educators, with one educator summarizing that "our tiered system is kind of nonexistent. . . Aside from special education and adding counseling supports, there's really not any Tier 2 interventions." This feedback highlights an important area for growth throughout the district around implementation of the district's vision for SST practices and protocols.

Family, Student, and Community Engagement and Partnerships

Medford ensures that families and students have multiple opportunities to engage with the district and support students' academic progress and general well-being. Families are represented on school site councils and the parent-teacher organizations from each school.

A review of Medford's 2021-2024 Strategic Plan includes a districtwide objective to "create a culture of collaboration through consistent community engagement." As a result, the district developed specific initiatives to achieve this goal, such as building and sustaining community partnerships; ensuring that all families are welcomed members of the school community; engaging in timely, two-way, and culturally proficient communication; and working collaboratively with community stakeholders. In addition, a review of school improvement plans indicates that some schools have cultivated a culture of collaboration through community engagement. For example, one of McGlynn Elementary School's goals for the 2022-2023 school year is to "increase the use of EL teaching strategies to reach [their] growing EL population and actively ensure that all EL families are welcomed members of the school community." Moreover, Medford High School's strategic objectives include not only "strengthen[ing] relationships between and amongst students, staff, families, and the community to ensure high quality, engaged learning for every student" but also "ensur[ing] two-way, respectful communication across the district, with families, and the Medford community."

Focus group responses and reviewed documents suggest that structures exist throughout the district to meaningfully engage parents, families, and community members in school leadership and decision making within schools. For example, each school site council is a representative group of school administrators, teachers, parents, families, and community members who participate in monthly meetings to develop and review their school improvement plans and approve school budget expenditures. Parents and families also can participate in their school's parent-teacher association, which allows them to work with school staff to enrich their child's educational experience by, for example, organizing and carrying out schoolwide educational and social events. District staff also shared that families are invited to take part in decision-making processes related to school governance, such as principal or assistant principal selection, funding a new playground, or the adoption of a new curriculum. Focus groups with parents indicated mixed feedback, with some participants familiar with the existing opportunities, whereas others indicated not understanding how to engage with school and district leaders. In addition to these leadership opportunities, Medford offers additional opportunities for parents and families to learn different strategies they can implement at home to assist in their child's learning. For instance, the district facilitated "Tech Goes Home," through which parents and families of ELs received a Chromebook, a year of free internet access, and a free 15-hour course to help them learn computer and internet basic skills. According to school improvement plans, some schools host education nights (e.g., mathematics night) to help families become familiar with newly adopted curricular materials.

In discussions of family communication and engagement, building and central office staff frequently described efforts to more effectively communicate with families who speak a language other than English. The district recently adopted TalkingPoints, which supports two-way communication with families in more than 100 different languages. This increased the ability at the district level to support two-way communication in families' home languages is a strength of the district. District staff expressed appreciation for this new platform. As one teacher shared,

> I've had huge success with TalkingPoints. . . . I feel like I've seen an 80% increase at least in my communication, . . . [and] I feel like there's a comfort level in communicating with this app, so I applaud that.

Across focus groups, several parents also expressed familiarity and satisfaction with the TalkingPoints app; however, feedback from families highlighted a great deal of variety in the apps and programs used across teachers and schools to communicate (e.g., TalkingPoints, Class Dojo, Google Classroom, SchoolBrains). Although some parents praised communication received from teachers and schools, others characterized the communication as lacking, challenging, and untimely. To illustrate, one parent explained that teachers use different applications to monitor student progress, which "are not updated on time"; therefore, students have inaccurate information "as the guidelines to see how they are doing in the class." This area for growth about the district's inconsistent practices related to family school communication was widely recognized by district staff and school committee members. Particularly, school committee members highlighted suggestions that they made to hire a communications director at the district level. They felt that this role could meaningfully impact the family experience and relationship with the community. Currently the bulk of communications comes from school leaders. As one district leader shared, "Some principals are really good communicators. Others don't communicate at all," which results in inconsistency throughout the district. When speaking about the plans to hire a communications director, one district leader shared as follows: "The communications opportunity to me is bigger than just telling people things . . . It's really about family engagement."

In June 2023, after the onsite visit, the district did hire a communications director; the new role is focused on explicitly increasing capacity to support consistent family engagement and communication, an area for growth for the district.

Recommendations

- The district should diagnose and address issues around DEI and school climate, and ensure that all students, no matter their background or home language, feel welcome in Medford schools.
- The district should identify inconsistencies around SST procedures and make structural adjustments to ensure fidelity with the district vision.
- With its new communications director, the district should both strengthen its district-wide communications and aid staff in developing their own skills to create quality, timely communication to families.

Financial and Asset Management

At Medford, developing and maintaining an operating budget is a collaborative and inclusive effort. The finance department includes accounts payable and payroll specialists, a grants coordinator, and a comptroller, who report to the assistant superintendent of finance and operations. In 2020, the district partnered with TMS, Inc. to conduct an operational review of the business and finance departments. The review resulted in recommendations regarding budget development and financial management.

Table 7 summarizes key strengths and areas for growth in financial and asset management.

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

Indicator	Strengths	Areas for growth
Budget documentation and reporting	■ Budget documents are clear, accurate, complete, and user-friendly and provide historical spending data for comparisons.	■ Alignment of publicly available budget documents to the district's strategic plan
Adequate budget	■ District spending exceeds net school spending requirements.	■ Increased collaboration between district leaders, the school committee, and the City of Medford to plan for and address potential changes and/or shortfalls within the budget
Financial tracking, forecasting, controls, and audits		■ Improved infrastructure to support tracking, forecasting, and controls
Capital planning and facility maintenance	■ The district collaborates with the City of Medford for capital planning.	

Budget Documentation and Reporting

Medford maintains clear and accurate budget documents that include information about all sources of funds and the allocation of resources. District budgets for fiscal year 2023 are publicly available on the district website. The district's budget documents and presentation to the school committee include pertinent information about the allocation of resources and the sources of funds. The current budget document provides information on funding sources, including federal and state grant funding. The presentation also includes historical spending data from fiscal year 2022 compared with the current year's resource allocations and projected retirement and enrollment data. Budget documents contain expenses for fixed costs, health insurance, special education, student services, security and maintenance, and compensation for all staff. Specific budget details are broken down by school. Publicly available budget documents also include historical data that go back to fiscal year 2008. Budget documents are a strength of the district because they are clear, accurate, complete, and user-friendly and provide historical spending data for comparisons. Details are sufficient for

stakeholders to understand the current year's resource allocation and explanations for needed resources. Budget documentation includes overall district budget information followed by grade band (e.g., elementary, middle, high school) and department (e.g., special education, multilingual learners, vocational studies) specific budget details.

Feedback from district staff and budget documentation highlight a connection between the district's budget and the strategic plan. For example, the *Fiscal Year 2023 Proposed Operating Budget* states that "the numerous previous public meetings in which [they] have discussed [their] strategic plan, priorities and goals as a district have helped to inform [their] decision-making in the development of [fiscal year] 23 budgetary recommendations." Moreover, district leaders described frequently connecting initiatives to the strategic plan to justify requests. However, beyond the process, the publicly available budget documents do not explicitly align actual spending to the strategic plan. This represents an area for growth for the district to further communicate the districts' strategic plan and how spending aligns with priorities.

Adequate Budget

Feedback across focus groups indicated that district leaders use all available funding to support student performance. Still, multiple respondents across focus groups described budget challenges and a desire for increased staffing, particularly to support students who are ELs and/or receive special education services. A review of publicly available data from DESE illustrates that in fiscal year 2022, the district exceeded net school spending requirements by 41.1%, a strength of the district. Still, in her letter introducing the fiscal year 2023 budget, the superintendent highlighted significant "strategic compromises," including shifting some personnel to onetime funding sources or revolving funds and issuing budget-related nonrenewal notices to some nonprofessional teacher status staff.

In addition to the general fund that the City of Medford provides, the district has received special funds—primarily from the American Rescue Plan and the Elementary and Secondary School Emergency Relief (ESSER) fund. This additional funding ends in 2024. District staff added that Title funds allow them to help schools establish programs to support the needs of students from low-income families and multilingual learners, as well as strengthen educator effectiveness. Furthermore, district staff added, "We rent to various churches on Sundays . . . and [the district's rental revenue] were really able to stop-gap and fill a lot of things." This statement indicates that revolving funds also support Medford's operations.

District leaders in multiple focus groups described that historically *collaboration* between the city and the district regarding budget really meant that the district proposed a budget that matched what the city wanted to allocate to the district. A recent change has been a budget proposal from the district that truly reflects what the district needs, as opposed to the budget available from the city. While district leaders spoke to the importance of this change in meeting student and community needs, they alluded to some challenges in changing old practice. Similarly, district staff described that the school committee approved a policy to provide all students with free breakfast and lunch, but that the decision did not include a concrete plan for funding this policy. This example highlighted an opportunity for improved proactive collaboration between district leaders, the school committee, and the City of Medford to plan for and address potential changes and/or shortfalls within the budget.

Financial Tracking, Forecasting, Controls, and Audits

The district's finance department comprises accounts payable specialists, payroll specialists, and a grants coordinator, all of whom report to the comptroller, who then reports to the assistant superintendent of finance and operations. Accounts payable staff create purchase orders and ensure that all bills are paid efficiently and on time. The finance department's payroll team not only handles payroll for teachers and 12-month employees but also processes timesheets for support staff such as paraprofessionals and custodians. Finally, the grants coordinator manages funds received through grants (e.g., Title, ESSER, Individuals with Disabilities Education Act), meets with the assistant superintendent of finance and operations and the assistant superintendent of academics and instruction to review available grants and "see if [the district] has the capacity to navigate applying for [them]." District staff also mentioned that although school and district administrators undertake grant writing, the grants coordinator manages the scheduling aspect of the grantmaking process to ensure that applications are completed on time, supporting documents are prepared, and accurate documentation of grant awards and expenditures are maintained. Regarding forecasting needs for the following year, district officials budget by examining staffing costs for next year, including projected salaries, absences, etc. They then look at existing contracts, and finally, they look to see what money is left, and direct resources appropriately.

In interviews, district staff noted that staff turnover at both the city and district levels presented challenges to seamless financial tracking, forecasting, and controls. In addition, they highlighted additional barriers noted by the TMS review related to their financial infrastructure. In particular, district leaders described limitations within their current financial software that prevents them from implementing some best practices related to financial forecasting, tracking, and controls. For example, district leaders indicated that within their current platform, they cannot encumber payroll funds, which they described as a major issue because salaries consume a significant amount of the overall budget. This challenge echoed across interviews and focus groups, in which concerns were raised about district staff occasionally experiencing payroll issues. District staff also shared concerns about a fragmented and disjointed financial infrastructure. Currently ADMINS (formerly Reflections) is the districts' main financial software system. Frontline is used for submitting HR paperwork and documents, Aesop is used to track attendance, and Harper's is the districts' payroll system. In addition, several departments use their own applications, including Excel or Adobe, to track their day-to-day operational needs and then compare the data, as ADMINS does not give the reporting structure or integration necessary for all users. Such a fragmented and disjointed accounting structure was highlighted by many district staff as a challenge related to financial operations. These concerns—raised both by district staff and the TMS Review—highlight a significant area for growth for the district regarding the infrastructure to support financial tracking, forecasting, and controls.

The Director of Finance for the City of Medford serves as the city auditor for all departments, including the school district. He described frequently conducting spot auditing for district accounts and noted that he has not seen anything concerning.

Capital Planning and Facility Maintenance

The City of Medford's fiscal year 2021-2026 Capital Improvement Plan is available online. This comprehensive plan includes both city-funded projects and projects funded through other means

(e.g., state or federal funding). The multiyear plan provides multiple benefits, such as strategic debt management, coordination of projects, and the avoidance of emergency costs. The plan also includes a capital investment strategy that extends across six years, allowing for a more accurate projection of future capital costs and annual budgetary impact. The plan includes 31 planned school projects, totaling $60,696,376 in estimated costs.

District staff shared that the City of Medford hired a facilities director in the past year after the city's mayor identified the maintenance of municipal buildings as a priority. District staff noted collaboration with the City of Medford to discuss staffing structure and major planned renovations. For example, the decision to have a shared facilities position highlighted opportunities to collaborate and merge resources to best support ongoing facility management for the entire community. Relatedly, district leaders collaborate with the city on major school projects, as illustrated in the city's overall Capital Improvement Plan. During focus groups, district staff explained that the first comprehensive capital planning process was implemented in response to challenges brought about by COVID-19 and was updated in 2023. Collaboration between the City of Medford and the district for capital planning is a strength for the district.

Recommendations

- The district should align each of its budget requests with priorities from its strategic plan, to better get a sense of which priorities are funded and which are not. The district may also want to consider conducting program evaluations on its investments, to ensure that is getting a strong return on investment.

- With its new budget grounded in student need, the district should work with its municipal counterparts to collaborate early and prepare for any anticipated shortfalls.

- In collaboration with its municipal partners, the district should streamline its financial infrastructure and systems so that finance functions and HR functions work seamlessly and budget managers can accurately direct their funds.

Appendix A. Summary of Site Visit Activities

The AIR team completed the following activities as part of the district review activities in Medford. The team conducted 81 classroom observations during the week of April 3, 2023, and held interviews and focus groups between March 31 and April 6, 2023. 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 members
- Principals
- Teachers
- Support specialists
- Parents
- Students
- City officials

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
- Curricular review process and timeline
- Medford curriculum unit template
- Published educational reports on the district by DESE
- 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

Medford Public Schools

Classroom Visits: Summary of Findings

Districtwide Instructional Observation Report

April 2023

Contents

Introduction

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

Four observers visited Medford Public Schools during the week of April 3, 2023. Observers conducted 81 observations in a sample of classrooms across seven schools. Observations were conducted in grades K-12 and focused primarily on literacy, English language arts, and mathematics instruction.

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

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

Table 1. CLASS K–3 Domains and Dimensions

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

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

Table 2. CLASS Upper Elementary and Secondary Domains and Dimensions

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

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

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

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

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

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

Positive Climate

Emotional Support domain, Grades K–12

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

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

Positive Climate District Average*: 4.9

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**81**	**4.9**
Grades K-5	0	0	2	6	13	7	2	30	5.0
Grades 6-8	0	0	3	2	7	7	1	20	5.1
Grades 9-12	1	1	3	7	11	7	1	31	4.6

*The district average is an average of the observation scores. In Table 3, the district average is computed as: ([1 x 1] + [2 x 1] + [3 x 8] + [4 x 15] + [5 x 31] + [6 x 21] + [7 x 4]) ÷ 81 observations = 4.9

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**	**81**	**5.6**
Grades K-5	0	0	0	0	8	12	10	30	6.1
Grades 6-8	0	0	1	3	6	4	6	20	5.6
Grades 9-12	0	2	3	4	5	12	5	31	5.2

*The district average is an average of the observation scores. In Table 4, the district average is computed as: ([2 x 2] + [3 x 4] + [4 x 7] + [5 x 19] + [6 x 28] + [7 x 21]) ÷ 81 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*: 4.0

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**81**	**4.0**
Grades K-5	1	2	5	8	11	2	1	30	4.2
Grades 6-8	1	3	8	2	5	0	1	20	3.6
Grades 9-12	2	5	4	6	8	6	0	31	4.0

*The district average is an average of the observation scores. In Table 5, the district average is computed as: ([1 x 4] + [2 x 10] + [3 x 17] + [4 x 16] + [5 x 24] + [6 x 8] + [7 x 2]) ÷ 81 observations = 4.0

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

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

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

Negative Climate

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

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

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

Negative Climate District Average*: 6.9

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**81**	**6.9**
Grades K-5	0	0	0	0	0	4	26	30	6.9
Grades 6-8	0	0	0	0	0	1	19	20	7.0
Grades 9-12	0	0	0	0	2	2	27	31	6.8

*The district average is an average of the observation scores. In Table 6, the district average is computed as: ([5 x 2] + [6 x 7] + [7 x 72]) ÷ 81 observations = 6.9

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

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

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

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

Behavior Management

Classroom Organization domain, Grades K–12

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

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

Behavior Management District Average*: 6.5

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**81**	**6.5**
Grades K-5	0	0	0	0	3	8	19	30	6.5
Grades 6-8	0	0	0	1	0	8	11	20	6.5
Grades 9-12	0	1	0	0	1	8	21	31	6.5

*The district average is an average of the observation scores. In Table 7, the district average is computed as: ([2 x 1] + [4 x 1] + [5 x 4] + [6 x 24] + [7 x 51]) ÷ 81 observations = 6.5

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*: 6.5

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	81	6.5
Grades K-5	0	0	0	0	3	11	16	30	6.4
Grades 6-8	0	0	0	0	1	7	12	20	6.6
Grades 9-12	0	0	0	0	3	7	21	31	6.6

*The district average is an average of the observation scores. In Table 8, the district average is computed as: ([5 x 7] + [6 x 25] + [7 x 49]) ÷ 81 observations = 6.5

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*: 5.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	81	5.2
Grades K-5	0	0	0	0	16	13	1	30	5.5
Grades 6-8	0	0	0	2	15	2	1	20	5.1
Grades 9-12	0	0	4	1	21	3	2	31	4.9

*The district average is an average of the observation scores. In Table 9, the district average is computed as: ([3 x 4] + [4 x 3] + [5 x 52] + [6 x 18] + [7 x 4]) ÷ 81 observations = 5.2

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*: 2.9

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	18	2.9
Grades K-3**	0	8	6	2	2	0	0	18	2.9

*The district average is an average of the observation scores. In Table 10, the district average is computed as: ([2 x 8] + [3 x 6] + [4 x 2] + [5 x 2]) ÷ 18 observations = 2.9

**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*: 4.5

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	63	4.5
Grades 4-5**	0	0	1	5	4	2	0	12	4.6
Grades 6-8	0	2	5	4	5	4	0	20	4.2
Grades 9-12	0	2	4	5	14	4	2	31	4.6

*The district average is an average of the observation scores. In Table 11, the district average is computed as: ([2 x 4] + [3 x 10] + [4 x 14] + [5 x 23] + [6 x 10] + [7 x 2]) ÷ 63 observations = 4.5

**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*: 3.1

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**63**	**3.1**
Grades 4-5**	0	3	4	1	4	0	0	12	3.5
Grades 6-8	5	4	7	2	0	2	0	20	2.7
Grades 9-12	4	6	7	10	1	2	1	31	3.3

*The district average is an average of the observation scores. In Table 12, the district average is computed as: ([1 x 9] + [2 x 13] + [3 x 18] + [4 x 13] + [5 x 5] + [6 x 4] + [7 x 1]) ÷ 63 observations = 3.1

**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*: 3.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	81	3.4
Grades K-5	3	5	8	6	6	2	0	30	3.4
Grades 6-8	2	5	4	2	4	1	2	20	3.6
Grades 9-12	5	4	9	8	4	1	0	31	3.2

*The district average is an average of the observation scores. In Table 13, the district average is computed as: ([1 x 10] + [2 x 14] + [3 x 21] + [4 x 16] + [5 x 14] + [6 x 4] + [7 x 2]) ÷ 81 observations = 3.4

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

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

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

Language Modeling

Instructional Support domain, Grades K – 3

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

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

Language Modeling District Average*: 3.4

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**18**	**3.4**
Grades K-3**	0	4	8	1	4	1	0	18	3.4

*The district average is an average of the observation scores. In Table 14, the district average is computed as: ([2 x 4] + [3 x 8] + [4 x 1] + [5 x 4] + [6 x 1]) ÷ 18 observations = 3.4

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

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

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

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

Instructional Dialogue

Instructional Support domain, Grades 4–12

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

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

Instructional Dialogue District Average*: 3.2

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	**2**	**3**	**4**	**5**	**6**	**7**	**63**	**3.2**
Grades 4-5**	1	2	4	1	3	1	0	12	3.5
Grades 6-8	4	7	6	1	0	2	0	20	2.6
Grades 9-12	6	2	6	7	8	1	1	31	3.5

*The district average is an average of the observation scores. In Table 15, the district average is computed as: ([1 x 11] + [2 x 11] + [3 x 16] + [4 x 9] + [5 x 11] + [6 x 4] + [7 x 1]) ÷ 63 observations = 3.2

**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*: 5.1

Grade Band	Low Range		Middle Range			High Range		n	Average
	1	2	3	4	5	6	7	63	5.1
Grades 4-5**	0	0	0	2	6	4	0	12	5.2
Grades 6-8	0	0	0	2	13	4	1	20	5.2
Grades 9-12	0	0	2	8	12	8	1	31	4.9

*The district average is an average of the observation scores. In Table 16, the district average is computed as: ([3 x 2] + [4 x 12] + [5 x 31] + [6 x 16] + [7 x 2]) ÷ 63 observations = 5.1

**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**	**2**	**7**	**14**	**32**	**25**	**39**	**120**	**5.5**
Positive Climate	0	0	2	6	13	7	2	30	5.0
Negative Climate**	0	0	0	0	0	4	26	30	6.9
Teacher Sensitivity	0	0	0	0	8	12	10	30	6.1
Regard for Student Perspectives	1	2	5	8	11	2	1	30	4.2
Classroom Organization Domain	**0**	**0**	**0**	**0**	**22**	**32**	**36**	**90**	**6.2**
Behavior Management	0	0	0	0	3	8	19	30	6.5
Productivity	0	0	0	0	3	11	16	30	6.4
Instructional Learning Formats***	0	0	0	0	16	13	1	30	5.5
Instructional Support Domain	**4**	**22**	**31**	**16**	**23**	**6**	**0**	**102**	**3.5**
Concept Development (K-3 only)	0	8	6	2	2	0	0	18	2.9
Content Understanding (UE only)	0	0	1	5	4	2	0	12	4.6
Analysis and Inquiry (UE only)	0	3	4	1	4	0	0	12	3.5
Quality of Feedback	3	5	8	6	6	2	0	30	3.4
Language Modeling (K-3 only)	0	4	8	1	4	1	0	18	3.4
Instructional Dialogue (UE only)	1	2	4	1	3	1	0	12	3.5
Student Engagement (UE only)	**0**	**0**	**0**	**2**	**6**	**4**	**0**	**12**	**5.2**

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([3 x 2] + [4 x 6] + [5 x 13] + [6 x 7] + [7 x 2]) ÷ 30 observations = 5.0

**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: ([6 x 4] + [7 x 26]) ÷ 30 observations = 6.9. In addition, Negative Climate appears in the Classroom Organization Domain for the Upper Elementary Manual.

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

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**	**12**	**7**	**18**	**11**	**8**	**60**	**4.7**
Positive Climate	0	0	3	2	7	7	1	20	5.1
Teacher Sensitivity	0	0	1	3	6	4	6	20	5.6
Regard for Student Perspectives	1	3	8	2	5	0	1	20	3.6
Classroom Organization Domain	**0**	**0**	**0**	**1**	**1**	**16**	**42**	**60**	**6.7**
Behavior Management	0	0	0	1	0	8	11	20	6.5
Productivity	0	0	0	0	1	7	12	20	6.6
Negative Climate**	0	0	0	0	0	1	19	20	7.0
Instructional Support Domain	**11**	**18**	**22**	**11**	**24**	**11**	**3**	**100**	**3.6**
Instructional Learning Formats	0	0	0	2	15	2	1	20	5.1
Content Understanding	0	2	5	4	5	4	0	20	4.2
Analysis and Inquiry	5	4	7	2	0	2	0	20	2.7
Quality of Feedback	2	5	4	2	4	1	2	20	3.6
Instructional Dialogue	4	7	6	1	0	2	0	20	2.6
Student Engagement	**0**	**0**	**0**	**2**	**13**	**4**	**1**	**20**	**5.2**

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([3 x 3] + [4 x 2] + [5 x 7] + [6 x 7] + [7 x 1]) ÷ 20 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 x 1] + [7 x 19]) ÷ 20 observations = 7.0

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	**3**	**8**	**10**	**17**	**24**	**25**	**6**	**93**	**4.6**
Positive Climate	1	1	3	7	11	7	1	31	4.6
Teacher Sensitivity	0	2	3	4	5	12	5	31	5.2
Regard for Student Perspectives	2	5	4	6	8	6	0	31	4.0
Classroom Organization Domain	**0**	**1**	**0**	**0**	**6**	**17**	**69**	**93**	**6.6**
Behavior Management	0	1	0	0	1	8	21	31	6.5
Productivity	0	0	0	0	3	7	21	31	6.6
Negative Climate**	0	0	0	0	2	2	27	31	6.8
Instructional Support Domain	**15**	**14**	**30**	**31**	**48**	**11**	**6**	**155**	**3.9**
Instructional Learning Formats	0	0	4	1	21	3	2	31	4.9
Content Understanding	0	2	4	5	14	4	2	31	4.6
Analysis and Inquiry	4	6	7	10	1	2	1	31	3.3
Quality of Feedback	5	4	9	8	4	1	0	31	3.2
Instructional Dialogue	6	2	6	7	8	1	1	31	3.5
Student Engagement	**0**	**0**	**2**	**8**	**12**	**8**	**1**	**31**	**4.9**

*The district average is an average of the scores. For example, for Positive Climate, the district average is computed as: ([1 x 1] + [2 x 1] + [3 x 3] + [4 x 7] + [5 x 11] + [6 x 7] + [7 x 1]) ÷ 31 observations = 4.6

**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: ([5 x 2] + [6 x 2] + [7 x 27]) ÷ 31 observations = 6.8

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

Table C1. Resources to Support Leadership and Governance

Resource	Description
Transforming School Funding: A Guide to Implementing Student-Based Budgeting (SBB) from Education Resource Strategies	This guide describes a process to help districts tie funding to specific student needs.
Principal Induction and Mentoring Handbook	A series of modules designed to support novice principals and their mentors in the development of antiracist leadership competencies aligned to the Professional Standards for Administrative Leadership.
Coherence Guidebook	This guidebook illustrates a systems-level path toward deeper learning. School system leaders and teams may use the guidebook, along with its companion self-assessment, to articulate a vision of deeper learning, identify high-leverage instructional priorities, refine tiered supports, and leverage systems and structures—all in service of the articulated vision.

Table C2. Resources to Support Curriculum and Instruction

Resource	Description
Curriculum Matters Webpage	A suite of resources to support the use of high-quality curriculum, including *IMplement MA*, our recommended four-phase process to prepare for, select, launch, and implement new high-quality instructional materials with key tasks and action steps. Also includes *CURATE*, which convenes panels of Massachusetts teachers to review and rate evidence on the quality and alignment of specific curricular materials and then publish their findings for educators across the Commonwealth to consult.
MA Curriculum Frameworks Resources	Some of the most frequently used resources include "What to Look For" classroom observation guides, the Family Guides help families understand what students are expected to know and do by the end of each grade, and the Standards Navigator tool and app which can be used to explore the standards, see how they are connected to other standards, related student work samples, reference guides, and definitions.
Mass Literacy Guide	An interactive site with research, information, and resources on evidence-based practices for early literacy that are culturally responsive and sustaining. There is current information on complex text, fluent word reading, language comprehension, students experiencing reading difficulties, equity in literacy, how to support a multitiered system of support for ELA/literacy, and much more.
Coherence Guidebook	The guidebook illustrates a systems-level path toward deeper learning. School system leaders and teams may use the guidebook, along with its companion self-assessment, to articulate a vision of deeper learning, identify high-leverage instructional priorities, refine tiered supports, and leverage systems and structures—all in service of the articulated vision.

Table C3. 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 C4. Resources to Support Human Resources and Professional Development

Resource	Description
Educator Evaluation Implementation Resources	A suite of resources and practical tools that reflect feedback from educators on how to implement educator evaluation in support of more equitable, culturally responsive schools and classrooms for all. These resources include Focus Indicators, a subset of Indicators from the Classroom Teacher and School Level Administrator Rubrics that represent high-priority practices for the 2022-2023 school year.
Guide to Building Supportive Talent Systems	Resources, considerations, and updates for recruiting, hiring, evaluating, and supporting educators and school staff, with a focus on racial equity.
Professional Learning Partner Guide	A free, online, searchable list of vetted professional development providers who have expertise in specific sets of high-quality instructional materials. Schools and districts can use this guide to easily find professional development providers to support the launch or implementation of high-quality instructional materials.

Table C5. Resources to Support Student Support

Resource	Description
Safe and Supportive Schools (SaSS) Framework and Self-Reflection Tool	Based on Five Essential Elements, these resources (see At-a-Glance overview) can help guide school- and district-based teams in creating safer and more supportive school climates and cultures. Through a phased process (with preliminary and deeper dive self-reflection options) teams can create plans based on local context and data and through examination of six areas of school operation.
MTSS Blueprint	This MTSS resource offers a framework for how school districts can build the necessary systems to ensure that all students receive a high-quality educational experience.
Prenatal through Young Adulthood Family Engagement Framework for Massachusetts	This resource offers a roadmap for practitioners and families in health, human services, and education. A companion document is the Family, School, and Community Partnership Fundamentals Self-Assessment Version 2.0
State and local student survey data such as VOCAL and Youth Risk Behavior Survey	State and local student survey data can provide information about student experiences, strengths, and needs. They also can help prompt additional local inquiry through focus groups, advisories, and ongoing communication with students, families, staff, and partners to inform continuous improvement efforts.

Table C6. Resources to Support Financial and Asset Management

Resource	Description
Spending Money Wisely: Getting the Most From School District Budgets (scroll down to Research section)	A discussion of the top 10 opportunities for districts to realign resources and free up funds to support strategic priorities.
Resource Allocation and District Action Reports (RADAR)	RADAR is a suite of innovative data reports, case studies, and other resources that provide a new approach to resource decisions.
Planning for Success	An inclusive, hands-on planning process designed to build district and school capacity and coherence while also building community understanding and support.
DESE spending comparisons website	A clearinghouse of school finance data reports and other resources available to district users and the public.

Appendix D. Enrollment, Attendance, Expenditures

Table D1. Medford Public Schools: Student Enrollment by Race/Ethnicity, 2022-2023

Group	District	Percentage of total	State	Percentage of total
All	4,166	100.0%	913,735	100.0%
African American	447	10.7%	85,662	9.4%
Asian	399	9.6%	67,010	7.3%
Hispanic	634	15.2%	221,044	24.2%
Native American	23	0.6%	2,155	0.2%
White	2,427	58.3%	496,800	54.4%
Native Hawaiian	3	0.1%	787	0.1%
Multi-Race, Non-Hispanic	233	5.6%	40,277	4.4%

Note. As of October 1, 2022.

Table D2. Medford Public Schools: Student Enrollment by High Needs Populations, 2022-2023

Group	District			State		
	N	Percentage of high need	Percentage of district	*N*	Percentage of high need	Percentage of state
All students with high needs	2,257	100.0%	53.7%	508,820	100.0%	55.1%
Students with disabilities	872	38.6%	20.8%	179,095	35.2%	19.4%
Low-income households	1,642	72.8%	39.4%	386,060	75.9%	42.3%
ELs and former ELs	528	23.4%	12.7%	110,554	21.7%	12.1%

Note. As of October 1, 2022. District and state numbers and percentages for students with disabilities and high needs are calculated including students in out-of-district placements. Total district enrollment including students in out-of-district placement is 4,201; total state enrollment including students in out-of-district placement is 923,349.

Table D3. Medford Public Schools: Chronic Absence[a] Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	4,365	11.2	19.6	30.2	27.7
African American/Black	490	8.4	26.1	32.4	32.0
Asian	411	8.7	10.5	20.0	15.4
Hispanic/Latino	658	18.0	35.4	43.9	42.3
Multi-Race, non-Hispanic/Latino	225	9.4	17.1	32.9	28.4
Native American	19	0.0	25.0	15.8	37.8
Native Hawaiian, Pacific Islander	3	—	—	—	32.1
White	2,559	11.0	16.2	27.7	22.1
High needs	2,545	16.2	29.5	39.3	37.1
Low income[b]	1,969	—	—	42.0	40.6
ELs	609	19.5	36.3	44.7	39.9
Students w/disabilities	919	15.8	30.4	37.1	36.9

[a] The percentage of students absent 10 percent or more of their total number of student days of membership in a school. [b] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table D4. Medford Public Schools: Expenditures, Chapter 70 State Aid, and Net School Spending, Fiscal Years 2020-2022

	Fiscal Year 2020		Fiscal Year 2021		Fiscal Year 2022	
	Estimated	Actual	Estimated	Actual	Estimated	Actual
Expenditures						
From local appropriations for schools						
By school committee	$61,250,000	$61,208,740	$60,313,257	$61,523,488	$63,724,500	$65,563,443
By municipality	$29,214,628	$34,373,764	$33,223,299	$31,687,758	$25,510,782	$24,559,686
Total from local appropriations	$90,464,628	$95,582,504	$93,536,556	$93,211,246	$89,235,282	$90,123,129
From revolving funds and grants	–	$7,512,683	–	$7,592,402	–	$10,795,992
Total expenditures	–	$103,095,187	–	$100,803,648	–	$100,919,121
Chapter 70 aid to education program						
Chapter 70 state aid[a]	–	$12,143,306	–	$12,143,306	–	$12,275,726
Required local contribution	–	$48,076,837	–	$49,107,581	–	$48,810,767
Required net school spending[b]	–	$60,220,143	–	$61,250,887	–	$61,086,493
Actual net school spending	–	$86,678,977	–	$83,216,994	–	$86,201,585
Over/under required ($)	–	$26,458,834	–	$21,966,107	–	$25,115,092
Over/under required (%)	–	43.9%	–	35.9%	–	41.1%

Note. Data as of February 10, 2023, and sourced from FY2022 district end-of-year reports and Chapter 70 program information on DESE website.

[a] Chapter 70 state aid funds are deposited in the local general fund and spent as local appropriations. [b] Required net school spending is the total of Chapter 70 aid and required local contribution. Net school spending includes only expenditures from local appropriations, not revolving funds, and grants. It includes expenditures for most administration, instruction, operations, and out-of-district tuitions. It does not include transportation, school lunches, debt, or capital.

Table D5. Medford Public Schools: Expenditures Per In-District Pupil, Fiscal Years 2020-2022

Expenditure category	2020	2021	2022
Administration	$458	$514	$606
Instructional leadership (district and school)	$1,385	$1,621	$1,329
Teachers	$8,167	$8,583	$8,717
Other teaching services	$1,217	$1,269	$1,398
Professional development	$61	$34	$40
Instructional materials, equipment, and technology	$635	$909	$858
Guidance, counseling, and testing services	$578	$655	$643
Pupil services	$1,273	$1,113	$1,599
Operations and maintenance	$1,393	$1,521	$1,631
Insurance, retirement, and other fixed costs	$5,233	$4,347	$4,030
Total expenditures per in-district pupil	$20,399	$20,565	$20,851

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

Appendix E. Student Performance Data

The COVID-19 pandemic had a profound impact on the 2020-2021 and 2021-2022 school years. Data reported in this appendix may have been affected by the pandemic. Please keep this in mind when reviewing the data and take particular care when comparing data across multiple school years.

Table E1. Medford Public Schools: Next-Generation MCAS ELA Achievement by Student Group, Grades 3-8, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	1,735	48	45	40	41	11	16	19	17
African American/Black	207	30	25	18	26	25	26	37	27
Asian	160	56	57	47	63	8	10	11	8
Hispanic/Latino	243	30	32	26	22	14	27	24	31
Multi-Race, non-Hispanic/Latino	97	53	69	51	48	5	1	12	14
Native American	12	40	—	33	29	20	—	33	25
Native Hawaiian, Pacific Islander	2	—	—	—	43	—	—	—	17
White	1,014	54	48	45	48	9	13	15	11
High needs	988	28	27	22	24	20	25	30	28
Low income[a]	755	—	—	23	24	—	—	28	28
ELs and former ELs	310	24	21	18	20	23	30	37	34
Students w/disabilities	402	14	13	12	11	33	39	49	46

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E2. Medford Public Schools: Next-Generation MCAS ELA Achievement by Student Group, Grade 10, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	296	62	61	53	58	6	12	13	8
African American/Black	39	36	44	33	41	14	15	21	13
Asian	33	60	80	67	79	3	0	12	4
Hispanic/Latino	38	56	43	29	38	5	22	29	17
Multi-Race, non-Hispanic/Latino	13	45	64	54	62	0	27	15	6
Native American	—	—	—	—	53	—	—	—	8
Native Hawaiian, Pacific Islander	—	—	—	—	45	—	—	—	16
White	173	69	65	60	65	5	10	8	4
High needs	165	43	38	28	38	12	23	24	15
Low income[a]	133	—	—	31	40	—	—	21	14
ELs and former ELs	42	25	18	7	21	21	39	43	30
Students w/disabilities	63	28	22	14	20	19	28	29	26

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E3. Medford Public Schools: Next-Generation MCAS Mathematics Achievement by Student Group, Grades 3-8, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	1,730	40	26	32	39	13	25	18	17
African American/Black	206	21	11	11	19	29	40	34	31
Asian	159	51	48	53	69	6	12	8	6
Hispanic/Latino	244	24	6	15	18	21	38	25	32
Multi-Race, non-Hispanic/Latino	95	42	35	41	44	11	20	13	16
Native American	12	30	—	17	27	30	—	25	23
Native Hawaiian, Pacific Islander	2	—	—	—	39	—	—	—	19
White	1,012	45	30	37	47	9	21	15	11
High needs	986	20	13	17	22	24	37	29	28
Low income[a]	754	—	—	16	20	—	—	28	29
ELs and former ELs	310	18	13	19	21	24	37	32	32
Students w/disabilities	400	11	8	11	12	40	53	49	45

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E4. Medford Public Schools: Next-Generation MCAS Mathematics Achievement by Student Group, Grade 10, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	294	56	41	43	50	8	16	14	10
African American/Black	38	34	20	26	26	14	24	18	20
Asian	32	70	60	63	78	0	7	6	4
Hispanic/Latino	38	53	26	26	26	5	16	21	21
Multi-Race, non-Hispanic/Latino	13	40	55	38	53	10	27	15	10
Native American	—	—	—	—	37	—	—	—	16
Native Hawaiian, Pacific Islander	—	—	—	—	48	—	—	—	19
White	173	60	46	47	59	8	15	13	6
High needs	163	35	18	20	28	14	30	26	19
Low income[a]	132	—	—	22	29	—	—	25	19
ELs and former ELs	41	36	9	7	17	7	23	37	32
Students w/disabilities	63	13	7	5	15	30	54	44	33

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E5. Medford Public Schools: Next-Generation MCAS Science Achievement by Student Group, Grades 5 and 8, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	605	42	34	38	42	13	21	20	18
African American/Black	87	19	20	17	21	30	39	37	31
Asian	54	42	34	48	65	11	13	15	8
Hispanic/Latino	90	27	18	21	20	13	28	28	33
Multi-Race, non-Hispanic/Latino	38	57	33	50	48	7	10	16	15
Native American	3	—	—	—	28	—	—	—	25
Native Hawaiian, Pacific Islander	—	—	—	—	41	—	—	—	20
White	333	50	41	45	52	10	18	14	10
High needs	341	22	19	20	24	26	34	34	29
Low income[a]	270	—	—	19	23	—	—	34	30
ELs and former ELs	100	21	10	12	18	26	41	48	37
Students w/disabilities	146	12	14	12	15	40	51	49	44

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E6. Medford Public Schools: Next-Generation MCAS Science Achievement by Student Group, Grade 10, 2019-2022

Group	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
All	278	—	—	46	47	—	—	19	14
African American/Black	37	—	—	27	25	—	—	27	25
Asian	30	—	—	57	70	—	—	13	6
Hispanic/Latino	32	—	—	28	23	—	—	38	28
Multi-Race, non-Hispanic/Latino	13	—	—	54	51	—	—	23	12
Native American	—	—	—	—	38	—	—	—	14
Native Hawaiian, Pacific Islander	—	—	—	—	45	—	—	—	23
White	166	—	—	52	56	—	—	15	8
High needs	148	—	—	24	26	—	—	36	24
Low income[a]	118	—	—	25	26	—	—	31	25
ELs and former ELs	32	—	—	6	13	—	—	69	43
Students w/disabilities	59	—	—	15	16	—	—	53	37

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E7. Medford Public Schools: ELA Mean Student Growth Percentile in Grades 3-8, 2019 and 2022

Group	N (2022)	2019	2022	State (2022)
All students	1,201	50.8	46.6	49.8
African American/Black	151	49.3	44.6	48.8
Asian	128	54.1	48.8	58.5
Hispanic/Latino	161	48.1	46.3	46.5
Multi-Race, non-Hispanic/Latino	70	56.9	49.3	51.5
Native American	5	—	—	46.2
Native Hawaiian, Pacific Islander	2	—	—	51.7
White	684	50.7	46.5	50.0
High needs	683	49.2	42.9	46.7
Low income[a]	537	—	43.6	46.5
ELs and former ELs	221	54.5	45.6	47.7
Students w/disabilities	261	48.4	39.6	41.8

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E8. Medford Public Schools: ELA Mean Student Growth Percentile in Grade 10, 2019 and 2022

Group	N (2022)	2019	2022	State (2022)
All students	250	50.9	53.5	50.0
African American/Black	31	48.8	55.9	49.8
Asian	27	51.1	59.5	56.0
Hispanic/Latino	26	47.5	36.5	47.6
Multi-Race, non-Hispanic/Latino	12	—	—	50.6
Native American	—	—	—	54.1
Native Hawaiian, Pacific Islander	—	—	—	49.5
White	154	52.0	55.3	50.1
High needs	126	46.2	45.2	47.7
Low income[a]	105	—	44.8	47.2
ELs and former ELs	16	—	—	50.5
Students w/disabilities	52	46.0	38.9	45.1

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E9. Medford Public Schools: Mathematics Mean Student Growth Percentile in Grades 3-8, 2019 and 2022

Group	N (2022)	2019	2022	State (2022)
All students	1,200	51.8	50.9	49.9
African American/Black	152	47.0	50.6	47.0
Asian	127	52.6	54.6	59.8
Hispanic/Latino	162	52.0	47.3	46.4
Multi-Race, non-Hispanic/Latino	71	51.1	52.9	51.0
Native American	4	—	—	49.5
Native Hawaiian, Pacific Islander	2	—	—	49.9
White	682	52.7	50.8	50.4
High needs	681	49.1	48.5	47.1
Low income[a]	535	—	49.5	46.4
ELs and former ELs	220	52.4	49.6	48.6
Students w/disabilities	260	48.0	44.6	43.3

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E10. Medford Public Schools: Mathematics Mean Student Growth Percentile in Grade 10, 2019 and 2022

Group	N (2022)	2019	2022	State (2022)
All students	250	49.9	60.5	50.0
African American/Black	30	47.9	66.1	45.6
Asian	27	63.1	66.7	57.3
Hispanic/Latino	26	51.1	54.4	44.4
Multi-Race, non-Hispanic/Latino	12	—	—	50.0
Native American	—	—	—	46.6
Native Hawaiian, Pacific Islander	—	—	—	41.2
White	155	48.0	59.4	51.6
High needs	126	49.0	52.9	46.7
Low income[a]	104	—	53.5	45.6
ELs and former ELs	16	—	54.4	48.9
Students w/disabilities	52	46.7	41.3	47.3

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E11. Medford Public Schools: Next-Generation MCAS ELA Achievement by Grade, 2019-2022

Grade	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
3	274	45	53	44	44	10	10	15	15
4	269	56	49	41	38	9	12	17	16
5	297	49	47	38	41	7	13	13	13
6	300	38	47	31	41	14	21	28	22
7	282	48	37	49	41	13	25	17	19
8	313	52	38	36	42	13	13	21	18
3-8	1,735	48	45	40	41	11	16	19	17
10	296	62	61	53	58	6	12	13	8

Table E12. Medford Public Schools: Next-Generation MCAS Mathematics Achievement by Grade, 2019-2022

Grade	N (2022)	Percentages meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
3	271	47	31	34	41	14	28	20	20
4	269	43	25	34	42	12	25	18	17
5	298	40	26	33	36	13	23	13	16
6	299	31	28	31	42	15	27	19	15
7	282	37	23	36	37	13	21	17	19
8	311	42	25	27	36	13	24	19	17
3-8	1,730	40	26	32	39	13	25	18	17
10	294	56	41	43	50	8	16	14	10

Table E13. Medford Public Schools: Next-Generation MCAS Science Achievement by Grade, 2019-2022

Grade	N (2022)	Percentage meeting or exceeding expectations				Percentage not meeting expectations			
		2019	2021	2022	State (2022)	2019	2021	2022	State (2022)
5	296	43	33	38	43	14	24	19	18
8	309	42	37	38	42	12	17	20	18
5 and 8	605	42	34	38	42	13	21	20	18
10	278	—	—	46	47	—	—	19	14

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

Table E14. Medford Public Schools: ELA Mean Student Growth Percentile by Grade, 2019 and 2022

Grade	N (2022)	2019	2022	State (2022)
3	—	—	—	—
4	226	46.4	46.9	50.0
5	250	47.2	45.3	49.9
6	248	43.9	40.8	49.8
7	225	55.8	52.5	49.7
8	252	59.9	48.1	49.7
3-8	1,201	50.8	46.6	49.8
10	250	50.9	53.5	50.0

Table E15. Medford Public Schools: Mathematics Mean Student Growth Percentile by Grade, 2019 and 2022

Grade	N (2022)	2019	2022	State (2022)
3	—	—	—	—
4	227	41.0	42.9	50.0
5	253	50.4	56.2	50.0
6	248	45.1	43.2	49.8
7	225	54.9	58.6	49.9
8	247	66.5	53.3	49.8
3-8	1,200	51.8	50.9	49.9
10	250	49.9	60.5	50.0

Table E16. Medford Public Schools: Four-Year Cohort Graduation Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	313	88.8	92.4	91.4	90.1
African American/Black	50	87.1	96.7	96.0	86.2
Asian	34	91.9	89.7	94.1	96.2
Hispanic/Latino	37	86.5	88.6	83.8	81.2
Multi-Race, non-Hispanic/Latino	12	100	90.9	91.7	88.7
Native American	—	—	—	—	82.2
Native Hawaiian, Pacific Islander	—	—	—	—	81.3
White	180	88.6	93.0	91.1	93.2
High needs	205	84.1	86.2	86.8	83.9
Low income[a]	172	83.5	89.1	88.4	83.2
ELs	25	70.7	60.0	68.0	73.1
Students w/disabilities	72	81.8	80.6	86.1	78.0

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E17. Medford Public Schools: Five-Year Cohort Graduation Rates by Student Group, 2019-2021

Group	N (2021)	2019	2020	2021	State (2021)
All students	302	92.5	93.0	93.4	91.8
African American/Black	30	85.7	91.9	96.7	88.1
Asian	29	92.9	94.6	89.7	97.0
Hispanic/Latino	44	93.6	91.9	90.9	84.0
Multi-Race, non-Hispanic/Latino	11	84.6	100	90.9	91.2
Native American	—	—	—	—	84.1
Native Hawaiian, Pacific Islander	—	—	—	—	87.7
White	187	94.3	92.9	94.1	94.4
High needs	167	87.1	90.5	88.0	85.8
Low income[a]	137	87.3	90.9	91.2	85.1
ELs	30	80.6	87.8	66.7	78.0
Students w/disabilities	62	83.9	87.0	82.3	80.6

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E18. Medford Public Schools: In-School Suspension Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	4,353	0.2	0.1	0.3	1.6
African American/Black	490	0.5	—	0.6	2.2
Asian	410	—	—	—	0.4
Hispanic/Latino	661	0.2	—	0.0	2.1
Multi-Race, non-Hispanic/Latino	226	—	—	0.9	1.8
Native American	19	—	—	—	2.4
Native Hawaiian, Pacific Islander	3	—	—	—	1.9
White	2,544	0.1	—	0.3	1.4
High needs	2,547	0.3	0.1	0.4	2.2
Low income[a]	1,964	—	—	0.4	2.3
ELs	633	0.2	—	0.0	1.4
Students w/disabilities	911	0.5	—	0.5	2.8

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E19. Medford Public Schools: Out-of-School Suspension Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	4,353	1.7	0.2	1.7	3.1
African American/Black	490	2.3	—	3.1	6.2
Asian	410	—	—	—	0.7
Hispanic/Latino	661	1.5	—	2.7	4.9
Multi-Race, non-Hispanic/Latino	226	—	—	1.8	3.5
Native American	19	—	—	—	4.3
Native Hawaiian, Pacific Islander	3	—	—	—	3.6
White	2,544	1.9	—	1.4	2.1
High needs	2,547	2.8	0.3	2.6	4.6
Low income[a]	1,964	—	—	2.7	5.2
ELs	633	2.0	—	0.9	3.5
Students w/disabilities	911	4.6	—	5.0	5.8

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E20. Medford Public Schools: Dropout Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	1,211	1.1	1.4	1.6	2.1
African American/Black	171	0.6	0.6	0.6	2.8
Asian	119	0.0	0.8	0.8	0.6
Hispanic/Latino	175	2.5	4.0	4.0	4.3
Multi-Race, non-Hispanic/Latino	48	4.3	0.0	2.1	2.4
Native American	1	—	—	—	4.3
Native Hawaiian, Pacific Islander	—	—	—	—	1.2
White	697	0.9	1.2	1.3	1.3
High needs	671	1.8	2.9	2.8	3.6
Low income[a]	527	1.7	2.7	3.4	3.8
ELs	105	6.6	6.4	5.7	7.8
Students w/disabilities	235	2.0	3.4	1.3	3.4

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.

Table E21. Medford Public Schools: Advanced Coursework Completion Rates by Student Group, 2020-2022

Group	N (2022)	2020	2021	2022	State (2022)
All students	622	56.6	57.3	55.3	64.9
African American/Black	91	56.4	38.3	52.7	55.5
Asian	66	69.8	66.1	65.2	84.9
Hispanic/Latino	84	45.5	55.3	39.3	49.2
Multi-Race, non-Hispanic/Latino	23	61.1	54.5	73.9	66.1
Native American	—	—	—	—	50.0
Native Hawaiian, Pacific Islander	—	—	—	—	65.4
White	358	56.3	60.6	56.7	69.5
High needs	337	43.0	40.3	43.0	49.1
Low income[a]	271	46.3	43.4	48.3	50.1
ELs	36	20.0	21.4	16.7	30.0
Students w/disabilities	121	25.7	25.0	22.3	34.3

[a] Since fall 2021, DESE no longer reports data for the economically disadvantaged student group and instead reports data for a newly defined low-income student group. This change also affects the high needs group.