



District Performance Diagnostic

2026 MCAS Benchmark Analysis

Sample District School District

Prepared for: Sample District School District

October 2026

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Performance Summary

Shown below are 2026 MCAS results for Sample District compared to the Massachusetts state average across all tested grades and subjects. Each displays the percentage of students Meeting or Exceeding Expectations. The peer benchmark results on the following pages provide a more meaningful performance comparison with districts sharing similar demographic and economic data to Sample District.

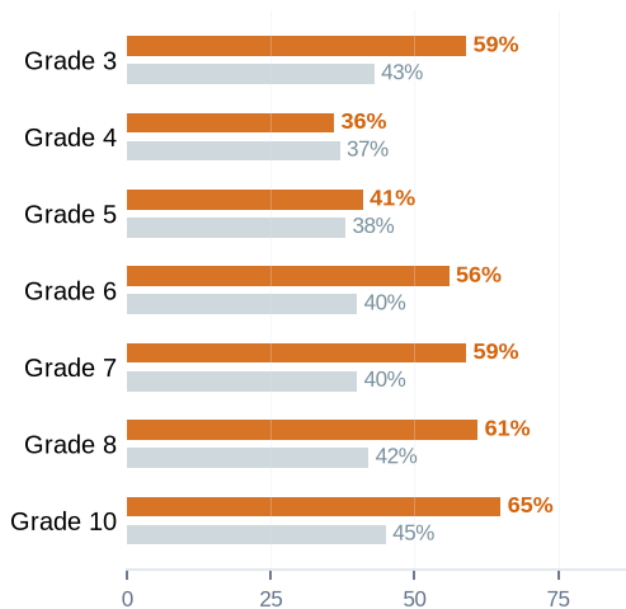
Sample District

Enrollment	2,104
Low Income	11.5%
High Needs	29.5%
English Learners	2.2%
Students with Disabilities	21.2%

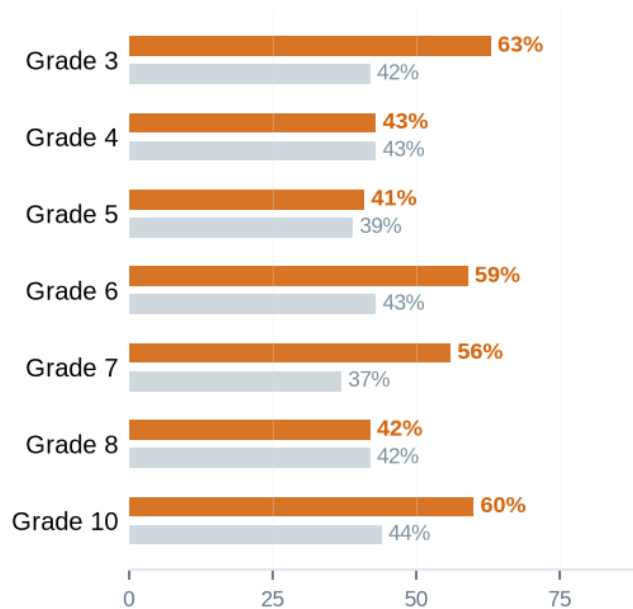
2026 MCAS Performance: Percentage of students meeting or exceeding expectations, by grade level and subject.

■ Sample District ■ State Average

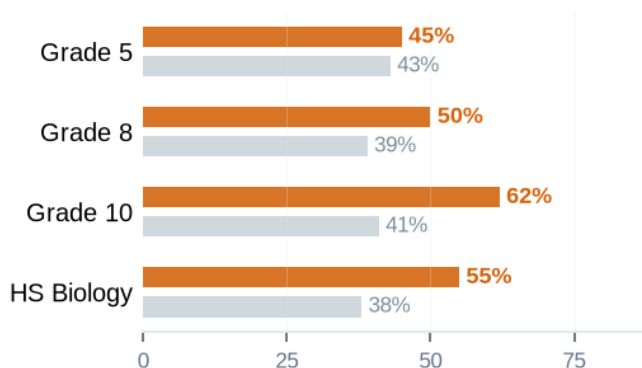
English Language Arts



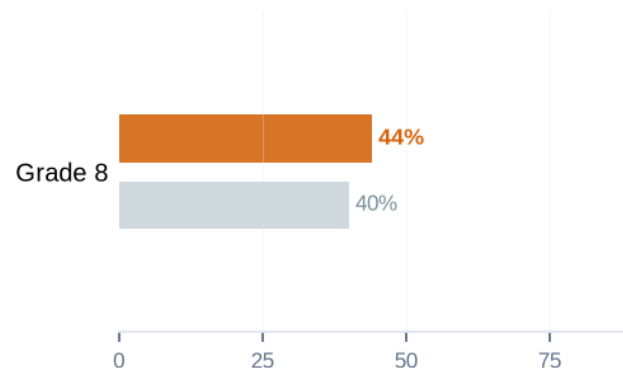
Mathematics



Science & Tech/Engineering



Civics



Data source: Massachusetts DESE, 2026 MCAS. The next section introduces the peer districts used for benchmarking throughout this report.

Peer Group & Methodology

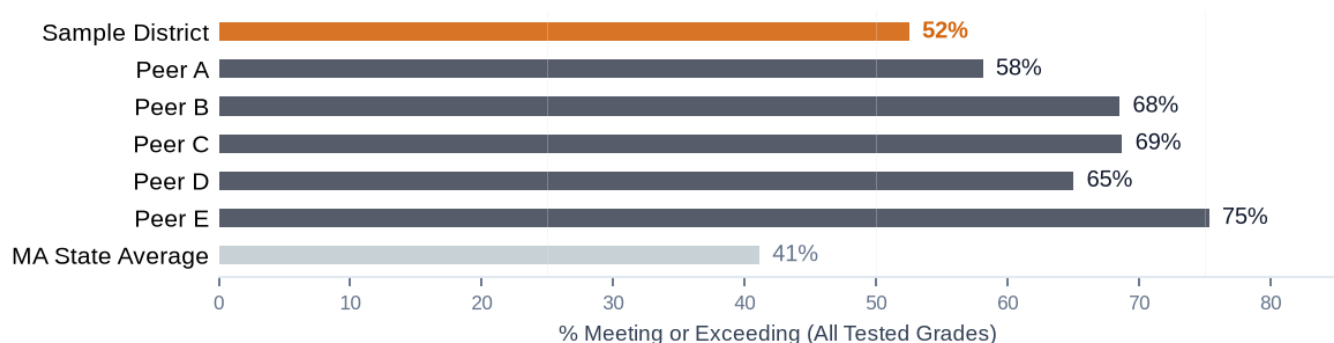
Peer districts were selected algorithmically based on six dimensions: enrollment size, economic profile (low-income percentage), English learner population, high-needs population, per-pupil spending, and student-teacher ratio. This multi-dimensional matching ensures peers are operationally comparable — not just demographically similar.

No two districts are identical. Peer comparisons are intended to provide meaningful context — not to suggest that any district is a perfect match. The selection criteria above are transparent and reproducible: given the same data, the same peers would be selected every time. Districts are welcome to suggest alternative peers for comparison; the analysis can be rerun with any peer group.

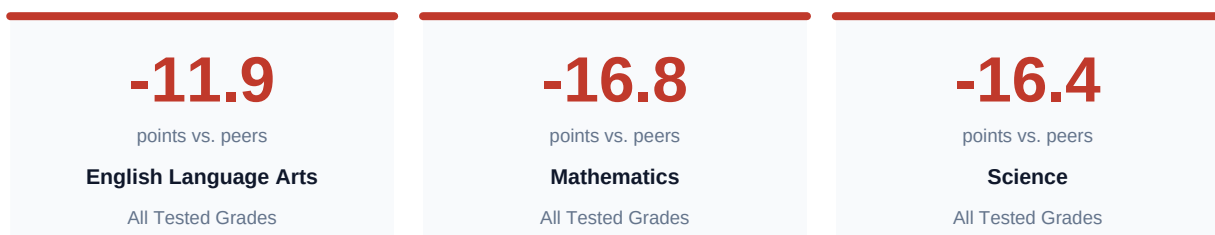
District	Enrollment	Low Income	High Needs	English Learners	Per-Pupil Spending	Student : Teacher
Sample District	2,104	11.5%	29.5%	2.2%	\$23,341	9.4
Peer A	2,389	12.7%	31.9%	2.7%	\$22,245	10.2
Peer B	2,335	10.7%	29.0%	1.8%	\$21,155	11.0
Peer C	2,535	8.3%	28.8%	2.3%	\$23,558	10.5
Peer D	2,397	12.2%	32.6%	4.5%	\$25,078	10.5
Peer E	2,662	8.6%	28.5%	2.2%	\$24,006	10.5

Data source: Massachusetts Department of Elementary and Secondary Education (DESE). 2026 MCAS, 2026 Enrollment, 2025 Per-Pupil Expenditure (in-district), 2026 Staffing. Student:Teacher ratio uses instructional staff FTE. Peer matching uses a weighted similarity score across all six dimensions. Candidates must be within 40-250% of target enrollment and serve 500+ students.

Overall Performance: District vs. Peers

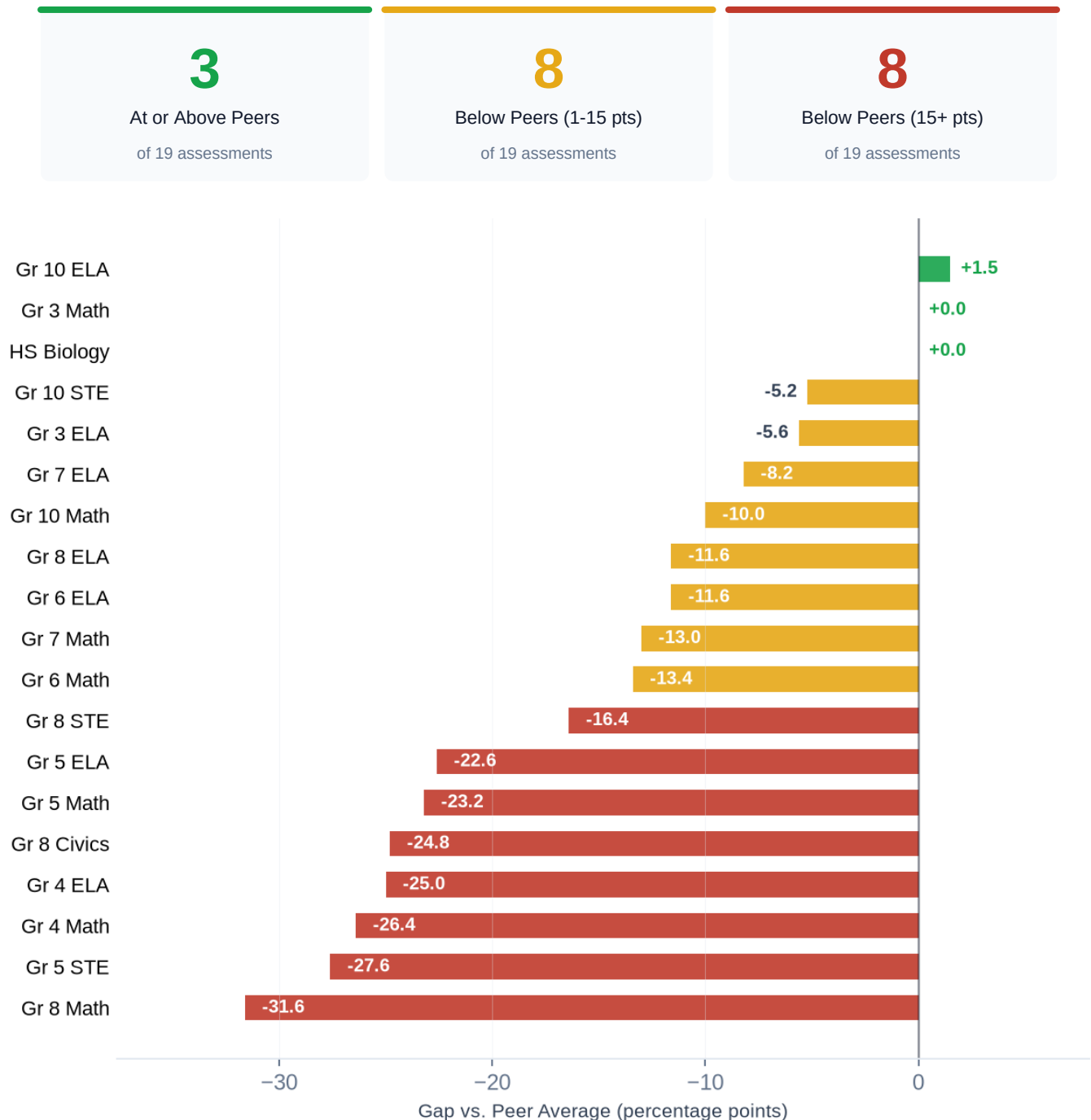


At a Glance: Average Gap vs. Peers



Performance vs. Peers

State reports compare Sample District against all Massachusetts districts regardless of size, demographics, or resources. A more meaningful comparison uses districts that serve similar student populations with similar funding. The five peer districts identified in this report were matched on enrollment, economics, per-pupil spending, and staffing. The peer-benchmarked results reveal where Sample District is performing relative to similarly-situated districts.



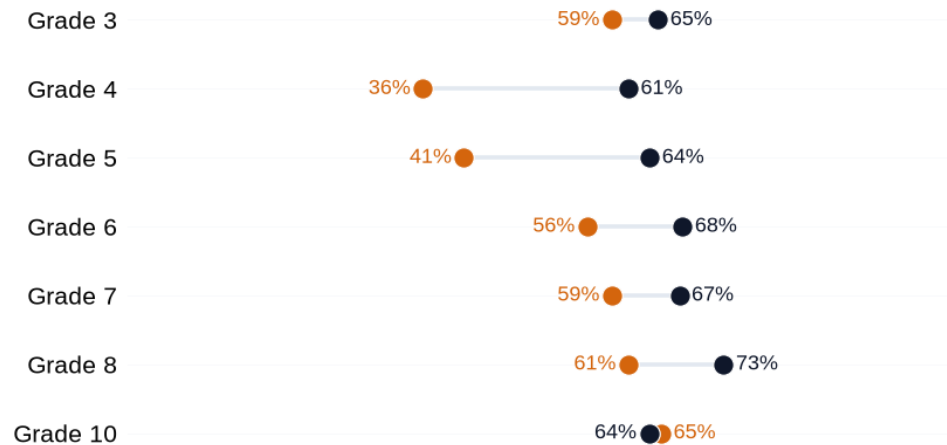
Each bar represents one grade-subject combination tested on 2026 MCAS. Red indicates a gap greater than 15 points. Amber indicates 5-15 points. Green indicates performance at or above peers.

Subject Analysis

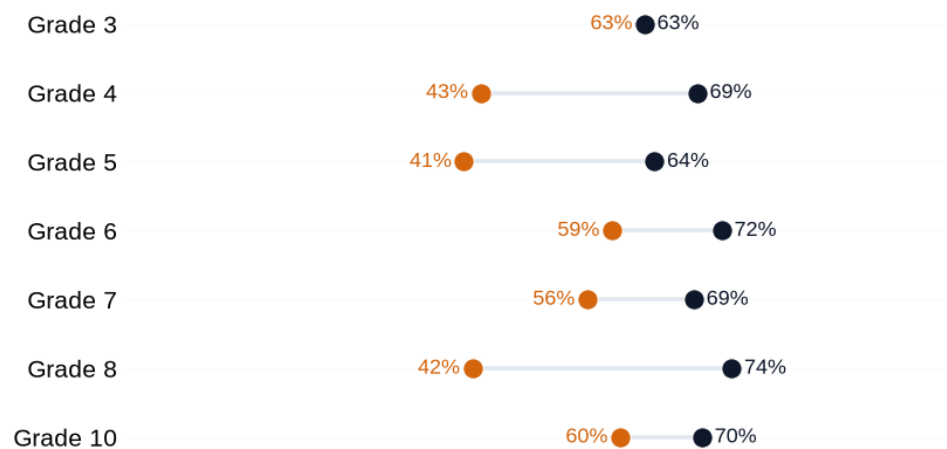
The chart below compares Sample District's proficiency rate to the peer average for each tested grade, organized by subject. Longer lines indicate larger gaps.

● Sample District ● Peer Average

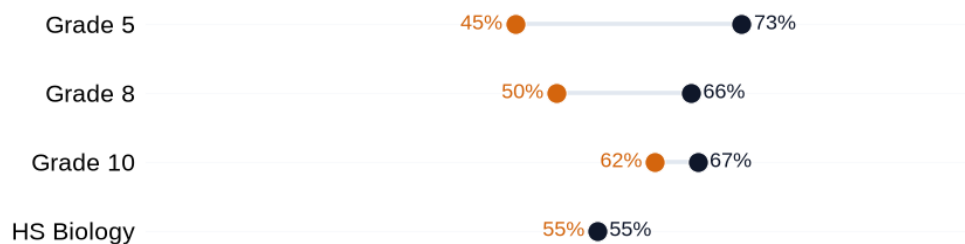
English Language Arts



Mathematics



Science & Technology/Engineering



0 20 40 60 80 100
% Meeting or Exceeding Expectations

Performance by School

District averages can mask where gaps originate. The table below breaks performance down by school and grade.

School	Test	District	State	Peers	Gap
Francis T Bresnahan	Gr 3 ELA	59%	43%	65%	-5.6
	Gr 3 Math	63%	42%	63%	+0.0
Edward G. Molin	Gr 4 ELA	37%	37%	61%	-24.0
	Gr 4 Math	43%	43%	69%	-26.4
	Gr 5 ELA	42%	38%	64%	-21.6
	Gr 5 Math	41%	39%	64%	-23.2
	Gr 5 STE	46%	43%	73%	-26.6
Rupert A Nock	Gr 6 ELA	56%	40%	68%	-11.6
	Gr 6 Math	59%	43%	72%	-13.4
	Gr 7 ELA	60%	40%	67%	-7.2
	Gr 7 Math	57%	37%	69%	-12.0
	Gr 8 Civics	44%	40%	69%	-24.8
	Gr 8 ELA	61%	42%	73%	-11.6
	Gr 8 Math	42%	42%	74%	-31.6
	Gr 8 STE	50%	39%	66%	-16.4
Newburyport High	Gr 10 ELA	65%	45%	64%	+1.5
	Gr 10 Math	60%	44%	70%	-10.0
	Gr 10 STE	62%	41%	67%	-5.2
	HS Biology	56%	38%	55%	+1.0

Edward G. Molin averages **-24.4 pts** vs. peers across 5 tested areas, while Francis T Bresnahan averages **-2.8 pts**. This within-district variation suggests the performance gaps are concentrated in specific schools and grade levels rather than reflecting a uniform district-wide pattern.

Edward G. Molin (avg -24.4): 5 of 5 areas more than 15 pts below peers. 0 at or above.

Rupert A Nock (avg -16.1): 3 of 8 areas more than 15 pts below peers. 0 at or above.

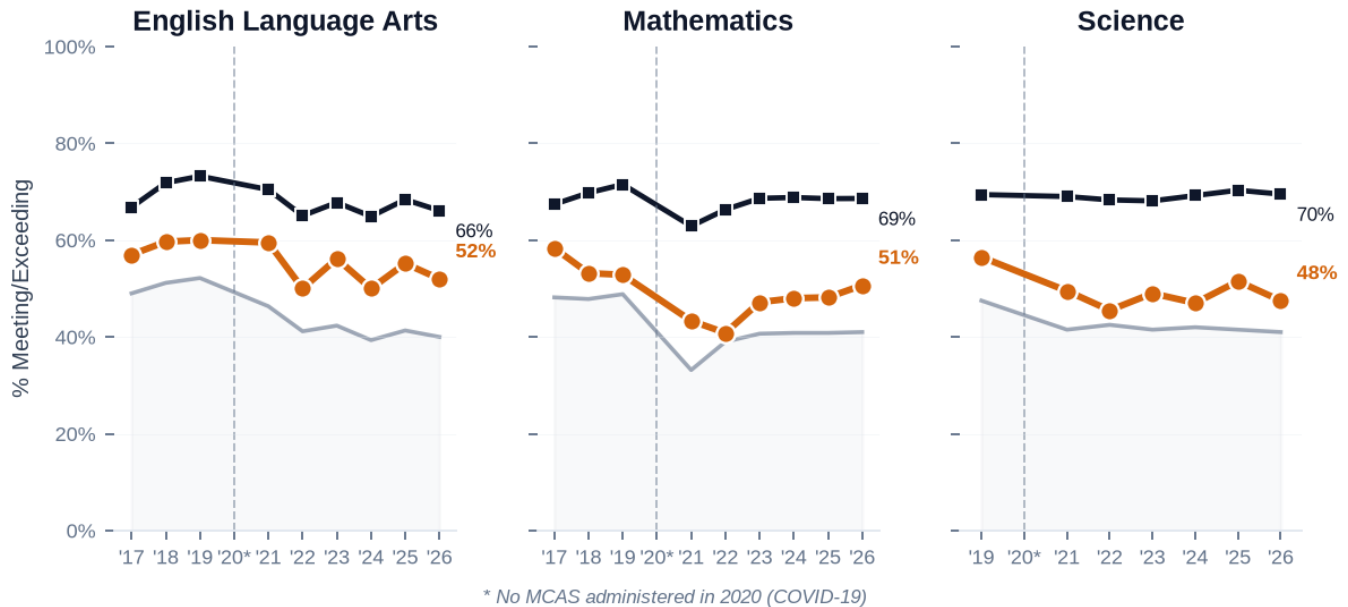
Newburyport High (avg -3.2): 2 of 4 areas at or above peers.

Francis T Bresnahan (avg -2.8): 1 of 2 areas at or above peers.

Trends & Growth

The trajectory reveals whether the district is improving, declining, or stagnating — and how the district compares to peer and state trends since 2019.

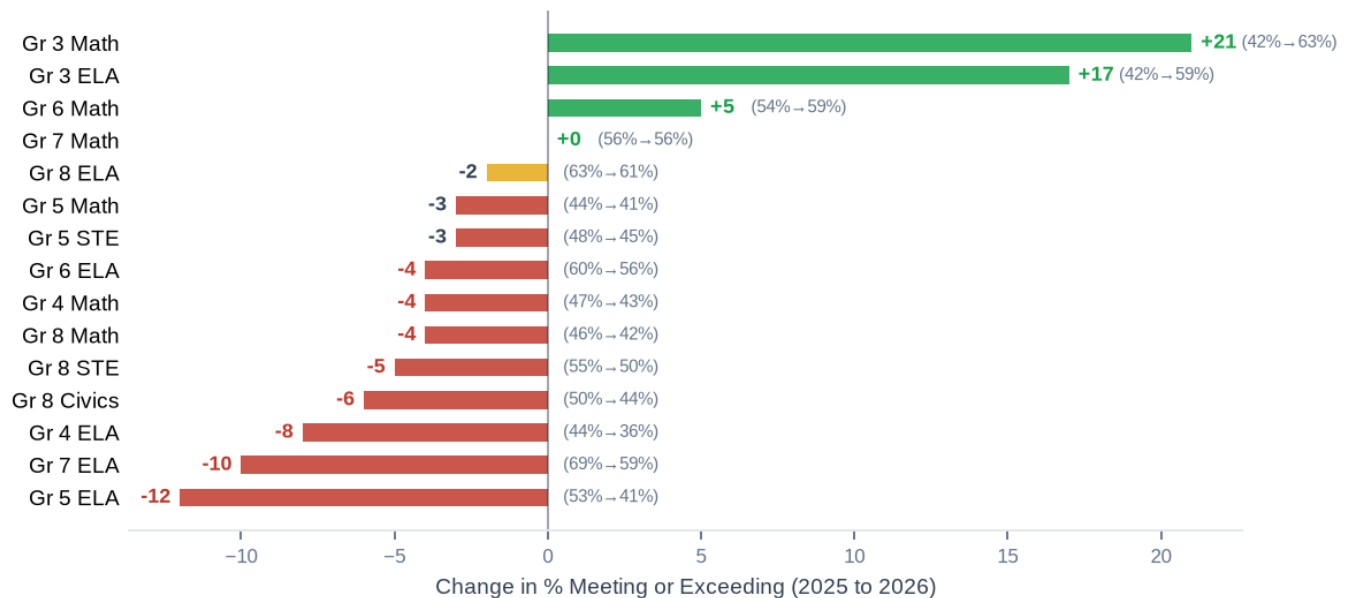
— Sample District — Peer Average — State Average



Grades 3-8 average proficiency.

Year-Over-Year Change (2025 to 2026)

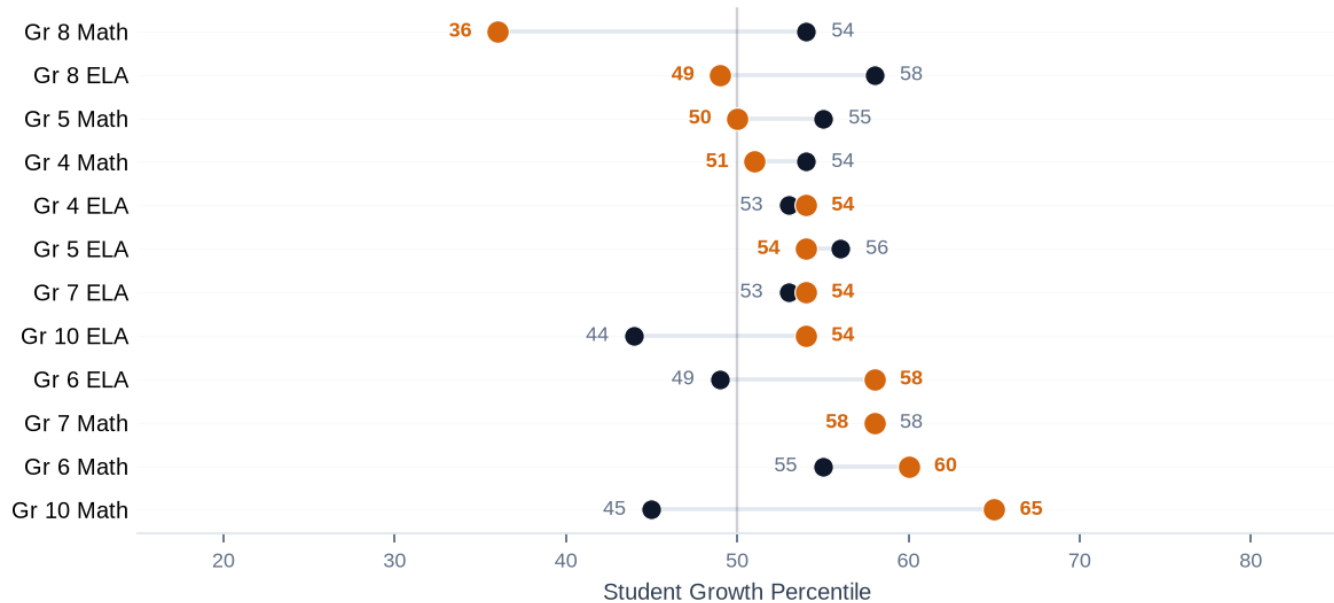
Of 15 tested grade-subject areas: 10 declining, 2 stable, 3 improving.



Student Growth Percentile (SGP)

Proficiency tells you where students are. Growth tells you whether they are catching up or falling further behind. The Student Growth Percentile (SGP) is a DESE metric that compares each student's year-over-year MCAS growth to other students who started at the same achievement level. An SGP of 50 means typical growth — the student grew as much as expected. Below 40 means students are growing slower than similar peers statewide. Above 60 means they are catching up.

● Sample District ● Peer Average



Grade 8 Math has an SGP of **36**. Students in this area are growing substantially slower than peers who started at the same level. Even if proficiency is low, adequate growth would indicate the gap is closing. An SGP this far below 50 means the gap is widening.

Since 2019: The Recovery Gap

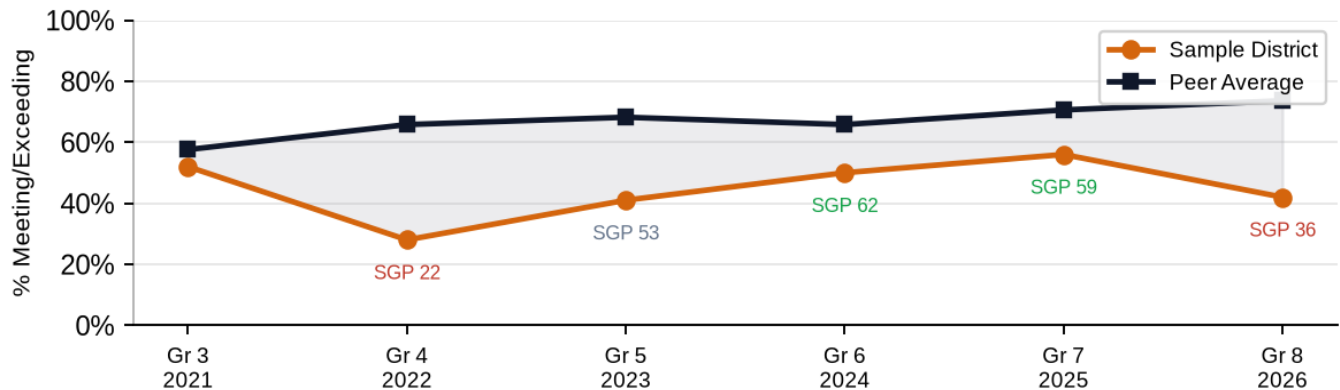
Subject	2019	2026	Change	Peer Change
English Language Arts	60%	52%	-8.0	-7.1
Mathematics	53%	51%	-2.1	-2.9
Science	56%	48%	-9.0	+0.1

Science proficiency is **9.0 percentage points** lower than 2019 (56% to 48%). Peer districts held essentially steady (+0.1). Note that these are different student cohorts being tested, not the same students over time.

Cohort Analysis

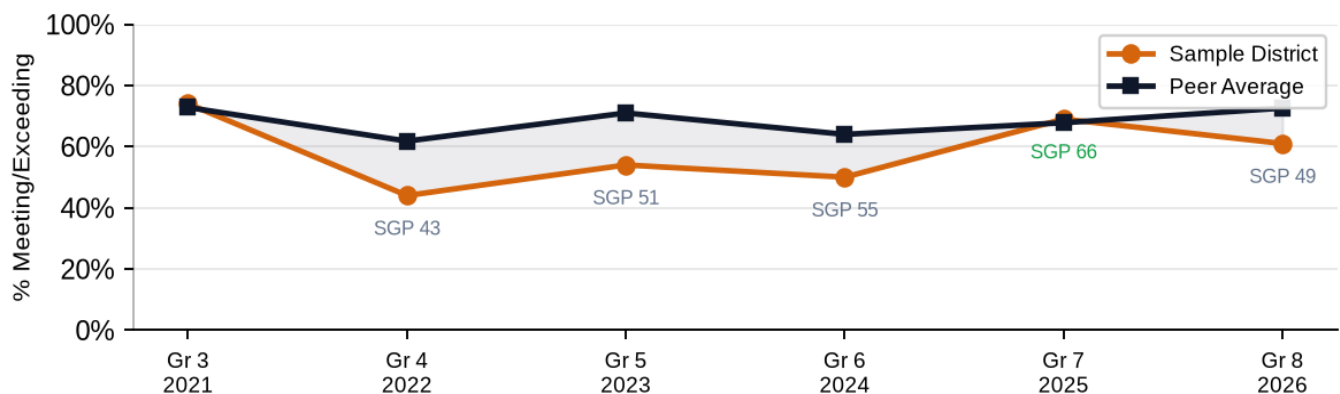
The charts on this page follow **actual student cohorts** as they move through grades. Unlike cross-sectional comparisons (which compare different students at different grades in the same year), cohort tracking shows how the same group of students has performed over time relative to peers.

Current Grade 8 — Math (cohort tracked from Grade 3, 2021)



This cohort started 6 pts below peers and is now 32 pts below — the gap widened by 26 points.

Current Grade 8 — ELA (cohort tracked from Grade 3, 2021)



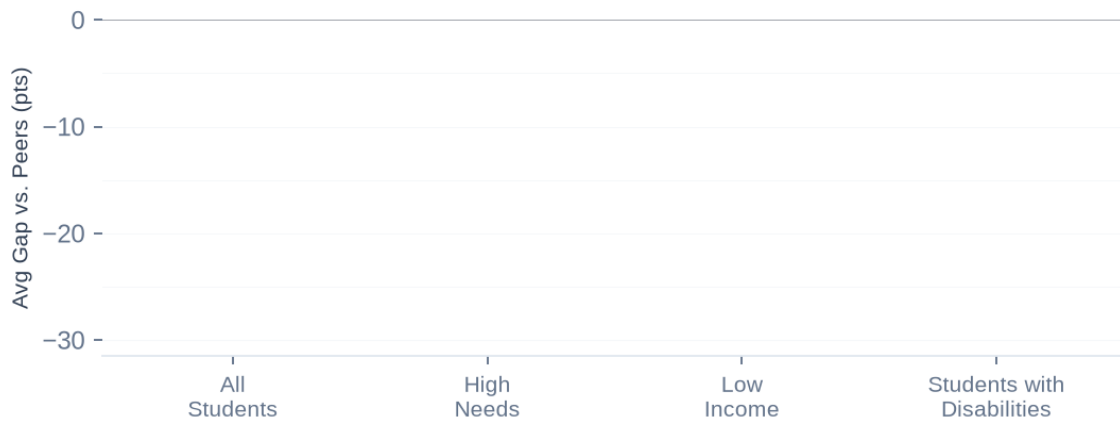
This cohort started 1 pts above peers and is now 12 pts below — the gap widened by 13 points.

Note: Cohort tracking at the district level compares aggregate proficiency rates for the same grade-level group across years. Individual student mobility (transfers in and out) means the composition changes somewhat from year to year. In small districts, a few students entering or leaving can shift the percentage.

Equity Analysis

An initiative that raises averages but leaves equity gaps unchanged is not succeeding. This analysis asks: are the gaps larger for the students who need the most support?

■ ELA ■ Math ■ Science



High Needs students average **-12.3 pts** vs. peers (All Students: **-14.5**). Only **25%** of High Needs students meet expectations. Students with Disabilities: **-9.0 pts** vs. peers, with only **19%** meeting expectations. Sample District's SWD rate is 21.2%. (Note: SWD averages ~37 students per grade-subject cell — interpret with caution.) The narrower gap for these populations reflects peers also struggling — not strong district performance.

Proficiency by Student Population

ELA	Dist	Peers	Gap
All	54%	66%	-11.9
High Needs	25%	36%	-10.2
Low Income	31%	36%	-4.9*
Sw/Disabilities	19%	25%	-6.0*

Math	Dist	Peers	Gap
All	52%	69%	-16.8
High Needs	23%	38%	-14.2
Low Income	28%	32%	-4.2*
Sw/Disabilities	18%	28%	-10.2*

STE	Dist	Peers	Gap
All	52%	69%	-16.4
High Needs	24%	39%	-14.9
Low Income	30%	36%	-6.5*
Sw/Disabilities	17%	30%	-13.0*

Each table compares the district to the same population in peer districts. Where gaps are narrower for a subgroup than for All Students, it may reflect peers also struggling with that population rather than strong district performance. The absolute proficiency rates tell the fuller story.

** Interpret with caution: average per-grade sample size below 50 students. In small subgroups, a few students can shift the percentage substantially. — suppressed where any grade has fewer than 10 students (DESE suppression threshold).*

Summary of Opportunities

The following synthesizes the key findings from the preceding analysis of Sample District's performance, growth, equity, and trend data into the highest-priority opportunities for improvement and strengths to build on.

Opportunities

1. Math: Grade 4 Behind Peers

In Math, Grade 3 students are 0 pts above peers, while Grade 4 students are 26 pts below. This is a cross-sectional pattern (different students in each grade). The cohort analysis on the following page tracks whether this pattern holds when following the same students over time.

2. Grade 8 Math: Widest Gap (-31.6 pts)

Only 42% meet expectations vs. 74% in peers. SGP of 36 (peer average ~54) suggests the gap may be widening — students are growing slower than peers who started at the same level. Multi-year SGP trends provide a more reliable signal.

3. Edward G. Molin: Widest School-Level Gaps

Averages -24.4 pts vs. peers across 5 tested areas. 5 of 5 areas are more than 15 points below peers. School-level averages do not account for differences in student composition across schools.

4. Mathematics (-16.8 pts avg)

6 of 7 tested grades more than 5 points below peers.

5. Science & Technology/Engineering (-16.4 pts avg)

3 of 3 tested grades more than 5 points below peers.

6. English Language Arts (-11.9 pts avg)

6 of 7 tested grades more than 5 points below peers.

7. Science: Below 2019 Levels

Proficiency is 9.0 pts lower than 2019 (56% to 48%). Note: these are different student cohorts, not the same students over time. Peers held essentially steady (+0.1).

8. Students with Disabilities

Only 19% of students with disabilities meet expectations across subjects. The absolute proficiency rates, not just the peer gap, indicate the scale of the challenge.

9. Grade 8 ELA: Cohort Gap Widened

This cohort started 1 pts above peers in Grade 3 (2021) and is now 12 pts below peers in Grade 8. The gap widened by 13 points over 6 years of testing.

10. Grade 8 Math: Cohort Gap Widened

This cohort started 6 pts below peers in Grade 3 (2021) and is now 32 pts below peers in Grade 8. The gap widened by 26 points over 6 years of testing. The weakest growth year was Grade 4 (2022), when the SGP was 22.

Strengths to Build On

Grade 3: Strong Year-over-Year Gains

Math and ELA improved by +21, +17 pts respectively year-over-year. These gains warrant investigation to identify replicable practices.

Newburyport High: Near or Above Peers

Averages -3.2 pts vs. peers. 2 of 4 areas at or above peer performance.

Francis T Bresnahan: Near or Above Peers

Averages -2.8 pts vs. peers. 1 of 2 areas at or above peer performance.

Grade 6 Math: Recovery in Progress

This cohort reached 24 pts below peers in Grade 5 (2025). Since then, the gap has narrowed to 13 pts. SGPs above 50 in recent years suggest students are growing faster than peers, closing the gap.

Grade 7 Math: Recovery in Progress

This cohort reached 30 pts below peers in Grade 4 (2023). Since then, the gap has narrowed to 13 pts. SGPs above 50 in recent years suggest students are growing faster than peers, closing the gap.

What the Evidence Says

This diagnostic identifies the gaps. The question is what kind of response actually moves outcomes. The research is clear on what works — and what doesn't.

~\$18K per teacher	Traditional Professional Development TNTP studied three large districts and a charter network and estimated roughly \$18,000 per teacher per year on development, counting staff time. Only three in ten teachers improved, and nothing predicted who would. The dominant model — single-session workshops — rarely changes instruction. <i>TNTP, 2015; Government Accountability Office (GAO), 2026</i>
Respectable but limited	AI tools without framework The largest randomized trial of AI in education (Khanmigo, 18 schools) found tools alone produce 0.06-0.14 SD per year — a respectable result for a low-cost intervention, but limited by low engagement and no connection to instruction. <i>Oreopoulos & Low, NBER, 2026</i>
Substantially larger effects	AI supporting skilled professionals AI support for human tutors raised student mastery, especially for less experienced tutors (Wang et al., 2024). AI-assisted lesson planning cut preparation time by about 31% with no loss in quality (EEF, 2024). The pattern across professions: structured AI under skilled direction outperforms AI alone. <i>Wang et al., 2024; EEF, 2024; Brynjolfsson et al., 2025</i>
Embedded, not delivered	Prescribed strategies in daily practice The planning assistant carries the prescription into daily use. Teachers don't need to remember what they learned on a PD day — the assistant reinforces the strategies every time they use it. Professional learning sessions deepen what's already happening. <i>Bryk et al., 2015</i>

Alignment with state priorities: The Graduation Council has recommended AI and digital literacy as a required MyCAP milestone module for incoming 9th graders (2027-28), advisory until the legislature acts. DESE's next phase is embedding AI across educator preparation and curricula (2026-27). This engagement is how a district implements both — not as a separate initiative, but through improved instruction that also meets all seven research-based standards for effective professional development (Darling-Hammond et al., 2017).

What an Engagement Looks Like

The diagnostic identified some potential gaps. An engagement works with you and your teachers to close them. DirectEd delivers a complete instructional improvement system — not a workshop series, not a software license, not a consulting retainer. A defined engagement with defined deliverables and measured outcomes.

Strategy Prescription. The 3-5 highest-priority evidence-based strategies matched to the gaps this diagnostic identified. The prescription drives everything that follows — how the assistants are configured, what professional learning focuses on, and what gets measured.

AI Planning Assistants. A dedicated AI planning assistant for every participating teacher — configured to their adopted curriculum, Massachusetts standards, and diagnostic priorities. Handles differentiation, formative assessment, lesson planning, parent communications, and more — across all of a teacher's classes. The assistant supports preparation and paperwork; it does not work with students.

Build Day. A full day, on-site. Teachers meet their assistant, personalize it for their classes and students, and practice 5+ core workflows with their own curriculum content. Organized by school level so the content stays focused on the grades and subjects in the room. Teachers leave with materials they'll use Monday morning.

Professional Learning. 6 sessions across the engagement, spaced every 5-6 weeks during active school months. Prescription-driven — sessions focus on what the data says teachers need, not a fixed curriculum. Includes 2 quarterly reviews with outcome data, disaggregated by subgroup.

Measurement and Accountability. Baseline, 30-day, 90-day, and end-of-engagement surveys. Classroom observation. Usage analytics. Impact report with MCAS comparison. When the school committee asks "what did we get for that investment?" — the answer is documented.

Capacity Building. District coaches are trained to lead coaching cycles. A working group grows into facilitation leadership across the engagement. By the final session, the capability belongs to the district.

What makes this different: Most AI training teaches teachers to use a tool. Most PD delivers workshops disconnected from daily practice. DirectEd starts with your data, prescribes strategies matched to your gaps, configures AI assistants that carry those strategies into every lesson, and measures whether outcomes move. The assistant isn't the product — improved student outcomes are.

Engagement options: Department pilot (up to 20 teachers), school pilot (one school or school level), or full district / multiple schools. All structured below the MA Chapter 30B simplified procurement threshold. Timeline is flexible — the engagement runs for one full instructional cycle, regardless of start date.

Massachusetts alignment: Consistent with DESE Generative AI Policy Guidance (2025) and the Graduation Council's recommended AI literacy requirements (advisory until the legislature acts). Meets all seven research-based standards for effective professional development (Darling-Hammond et al., 2017). Eligible for Title II-A funding.

Student data privacy: Students identified by first name or initials only. No student records enter the AI system. The diagnostic uses only public DESE data. Consistent with FERPA and 603 CMR 23.00.

About DirectEd

Mike Luekens founded DirectEd to help Massachusetts school districts improve student outcomes through a system that connects diagnosis to action: data-driven analysis, evidence-based strategy, AI-integrated teacher support, and continuous measurement.

The Problem. Massachusetts students are 8-12 points below pre-pandemic levels. Most districts' PD budgets produce no measurable change in instruction (TNTP, 2015; GAO, 2026). Meanwhile, 68% of teachers using AI have had no formal training from their school or district (Gallup-Walton, 2025).

Our Approach: Directors, Not Users. The value of AI in a school depends less on the tool than on the professional directing it. DirectEd develops the professional judgment teachers need to direct AI effectively: clarity of purpose, managed complexity, critical evaluation, iterative refinement. These same skills make classroom questioning sharper, assessments more precise, and feedback more actionable. AI doesn't replace teacher expertise — it multiplies it.

Diagnose. A peer-benchmarked analysis (like this report) identifies where students are relative to similar districts — by grade, subject, and subgroup. **Respond.** A strategy prescription matches evidence-based strategies to the gaps. Every teacher gets an AI planning assistant configured to their curriculum and diagnostic priorities. Build Day puts working tools in teachers' hands. **Measure.** Baseline through end-of-engagement surveys, classroom observation, usage analytics, and MCAS comparison. Every indicator disaggregated by subgroup. **Adjust.** Quarterly reviews produce specific changes based on what the data shows.

Learn more: Visit directed.pro for more about DirectEd's approach, or read the full research framework — *Directors, Not Users: A Framework for AI-Integrated Instruction and Professional Development in Massachusetts* — available at directed.pro/framework.

This diagnostic is step one. The next step is a conversation about what these patterns mean for your students and what a targeted response would look like. No obligation — just information and options.

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