

Summary of the Next-Generation District and School Accountability System

Introduction

Since the approval of the Massachusetts state plan under the Every Student Succeeds Act (ESSA) in September 2017, the Department of Elementary and Secondary Education (DESE) has been refining plans for a new district and school accountability system. With the approval of the Board of Elementary and Secondary Education (Board), DESE will begin reporting results for all Massachusetts public schools and districts using this new system in fall 2018.

Background

State and federal laws require that DESE implement a system of district and school accountability. Prior to 2012, the Commonwealth's schools and districts were assessed based on both the state's five-level framework for accountability and assistance and the requirements of the federal No Child Left Behind Act. From 2012 to 2017, Massachusetts operated under a flexibility waiver from the U.S. Department of Education, which permitted us to implement a single, unified accountability system that maintained our state's high standards and expectations and met both federal and state requirements. The enactment of ESSA in 2015 and the state's transition to a Next-Generation MCAS assessment gave us the opportunity to rethink the design of our accountability system.

System Highlights

The purpose of the accountability system is to provide clear, actionable information to families, community members, and the public about district and school performance. Additionally, the accountability system helps DESE to direct resources and assistance. The framework for our new accountability system allows DESE to identify schools that require assistance or intervention, as well as schools that are demonstrating success. It maintains a single statewide accountability system that aligns with the Commonwealth's priorities while meeting federal education requirements. Highlights of the new system include:

- The inclusion of additional accountability indicators, which will provide information about school performance and student opportunities beyond test scores;
- A focus on raising the performance of each district's or school's lowest performing students in addition to the performance of the district or school as a whole; and
- The discontinuation of accountability and assistance levels (Levels 1 to 5), which will be replaced with accountability categories that better define the progress that districts and schools are making and the type of support or assistance they may receive from DESE.

Accountability System Elements

A description of each of the key elements of the new Massachusetts district and school accountability system is included below.

Accountability Indicators

Annual performance determinations for districts and schools will be calculated using the following accountability indicators:

Indicator	Measure
Achievement	<ul style="list-style-type: none"> English language arts (ELA) achievement Mathematics achievement Science achievement
Student Growth	<ul style="list-style-type: none"> ELA mean student growth percentile (SGP) Mathematics mean SGP
High School Completion	<ul style="list-style-type: none"> Four-year cohort graduation rate Extended engagement rate (five-year cohort graduation rate plus the percentage of students from the cohort who are still enrolled) Annual dropout rate
English Language Proficiency	<ul style="list-style-type: none"> Progress made by students towards attaining English language proficiency (percentage of students meeting annual targets calculated to attain English proficiency in six years)
Additional Indicator(s)	<ul style="list-style-type: none"> Chronic absenteeism (percentage of students missing 10 percent or more of their days in membership) Percentage of 11th & 12th graders completing advanced coursework (Advanced Placement, International Baccalaureate, dual enrollment courses, and other selected rigorous courses)

Weighting of Accountability Indicators

Federal law requires that substantial weight be given to the achievement, growth, English language proficiency, and graduation rate indicators, and that when taken together, these indicators should have much greater weight than the additional indicators.

In the most recent accountability system, achievement was weighted at 75 percent, and growth was weighted at 25 percent. However, the inclusion of new accountability indicators means that the percentages assigned to each indicator must change. Additionally, because not all districts and schools have an English learner subgroup, the weighting needs to remain flexible to accommodate districts and schools that have data for the English language proficiency indicator and those that do not.

Therefore, DESE proposes that the weighting of achievement and growth be thought of in terms of ratios instead of percentages. The most recent weighting, 75 percent achievement to 25 percent growth, is equivalent to a 3 to 1 ratio of achievement to growth. By using this approach, DESE can ensure that the ratio of achievement to growth remains consistent, but allow for flexibility in the actual percentages where necessary.

DESE recommends that the new accountability system maintain the achievement to growth ratio of 3 to 1, and apply the weightings shown in the tables below. Note that at the high school level, the high school completion indicators are considered part of achievement when calculating the ratio of achievement to growth.

Accountability Indicator Weightings – Non-High Schools

Indicator	Measures	Weighting (3:1)	
		With EL	No EL
Achievement	<ul style="list-style-type: none"> • ELA, math, & science achievement 	60%	67.5%
Student Growth	<ul style="list-style-type: none"> • ELA & math SGP 	20%	22.5%
English Language Proficiency	<ul style="list-style-type: none"> • Progress made by students towards attaining English language proficiency 	10%	--
Additional Indicators	<ul style="list-style-type: none"> • Chronic absenteeism 	10%	10%

Accountability Indicator Weightings – High Schools & Middle-High/K-12 Schools

Indicator	Measures	Weighting (3:1)	
		With EL	No EL
Achievement	<ul style="list-style-type: none"> • ELA, math, & science achievement 	40%	47.5%
Student Growth	<ul style="list-style-type: none"> • ELA & math SGP 	20%	22.5%
High School Completion	<ul style="list-style-type: none"> • Four-year cohort graduation rate • Extended engagement rate • Annual dropout rate 	20%	20%
English Language Proficiency	<ul style="list-style-type: none"> • Progress made by students towards attaining English language proficiency 	10%	--
Additional Indicators	<ul style="list-style-type: none"> • Chronic absenteeism • Advanced coursework completion 	10%	10%

Reported Measures

Accountability determinations will consist of a normative component and a criterion-referenced component, which will be used to classify districts and schools.

Normative Component

The normative component, or accountability percentile, measures the performance of all students in a school compared to other schools in the state. This measure is reported as a percentile, from 1 to 99, which is calculated using all available accountability indicators for a school. Schools are grouped together based on the statewide assessments that they administer: *non-high schools*, serving a combination of grades 3 through 8; *middle-high and K-12 schools*, serving one or more grades 3 through 8 and grade 10; and *high schools*, where the only tested grade is grade 10. Within each grouping, each school's performance on each indicator is ranked and weighted according to the weighting rules described above. The resulting accountability percentile provides information about how a school is doing compared to other schools administering similar assessments.

For the purposes of accountability reporting, the accountability percentile will be calculated only at the school level, for the all students group; it will not be calculated at the district level.

In the first year of reporting, the accountability percentile will be based only on data from 2018. However, after the first year of reporting, the accountability percentile will be based on multiple years of data.

Criterion-Referenced Component

The criterion-referenced component measures a district's or school's progress towards improvement targets. In the new accountability system, DESE will use data from all students in the district or school and the lowest performing students in the district or school to determine overall progress towards targets.

Lowest Performing Students Group

In an effort to control for student transiency, DESE intends to measure the performance of each district's and school's lowest performing students who have been enrolled for multiple years. Districts and schools will still be responsible for the annual performance of all students, as aggregate and subgroup results will include all students enrolled in the school since the beginning of the school year. However, results for the lowest performing students group will include only those students who have been enrolled in the same school for two consecutive years.

If a district or school does not have test results for enough students to establish a reportable lowest performing students group, the district's or school's accountability determination will be based on the performance of all students.

Target-Setting

For each district or school as a whole and for the lowest performing students group, improvement targets will be set for each of the accountability indicators as shown in the table below.

Indicator	Non-high schools		High schools & middle/high/K-12 schools	
	All students	Lowest performing students	All students	Lowest performing students
ELA achievement	✓	✓	✓	✓
Math achievement	✓	✓	✓	✓
Science achievement	✓	-	✓	✓
ELA SGP	✓	✓	✓	✓
Math SGP	✓	✓	✓	✓
Four-year cohort graduation rate	-	-	✓	-
Extended engagement rate	-	-	✓	-
Annual dropout rate	-	-	✓	-
EL progress	✓	-	✓	-
Chronic absenteeism	✓	✓	✓	✓
Advanced coursework completion	-	-	✓	-

In 2018, targets will be set only for one year, using 2017 data as the baseline. DESE will set conservative, yet reasonable achievement targets for 2018. By grouping schools together based on historical school percentile ranges (e.g., schools with 2015 school percentiles 1-25) and looking at changes made by only those schools in the group that demonstrated improvement, DESE will use a statistical approach to apply the same expectation of improvement on the new test scale to all schools within the group. Long-term targets will be set in the future, once there are multiple years of Next-Generation MCAS data to analyze.

Targets for achievement on the legacy MCAS tests and for the non-assessment indicators will be set by analyzing past trends using data that DESE has been collecting and reporting for several years.

Criterion-Referenced Component Calculation

Based on each target and actual performance, DESE will assign points for each indicator as shown in the table below:

Declined	No change	Improved	Met target	Exceeded target
0	1	2	3	4

For the district or school as a whole, the actual points earned and the total possible points will be reported for each indicator. The points earned will be combined, weighted according to the weightings described above, and calculated into a percentage of possible points for the all students group. The same will be done for the lowest performing students group. The two percentages of possible points values will then be averaged, resulting in the district's or school's overall criterion-referenced target percentage. The goal is to earn 75 percent or higher, which represents meeting targets. An example of this calculation for a non-high school is displayed in the table below.

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	Total possible points	Weight	Points earned	Total possible points	Weight
ELA scaled score	3	4	-	2	4	-
Math scaled score	2	4	-	2	4	-
Science achievement	2	4	-	-	-	-
Achievement total	7	12	60%	4	8	67.5%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	7	8	20%	8	8	22.5%
EL progress	2	4	10%	-	-	-
Chronic absenteeism	3	4	10%	4	4	10%
Weighted total	6.1	9.6	-	4.9	7.6	-
Percentage of possible points	63.5%		-	64.5%		-
Criterion-referenced target percentage	64%					

At the high school and district levels, similar calculations will be done using all available indicators (e.g., the indicators above, plus high school completion and advanced coursework completion) and the related indicator weightings.

In 2018, the criterion-referenced component will only include data from 2017 and 2018. However, after the first year of reporting, the criterion-referenced component will include multiple years of data.

Subgroup Reporting

While a district's or school's accountability determination will be primarily based on the performance of the district or school as a whole and its lowest performing students, DESE will continue to report accountability results at the subgroup level.

Accountability Subgroups

In addition to reporting results for each district or school as a whole, accountability results will be reported for the following 11 subgroups: American Indian or Alaska Native; Asian; African American or Black; Hispanic or Latino; Multi-race, non-Hispanic or Latino; Native Hawaiian or Pacific Islander; White; economically disadvantaged students; students with disabilities; current and former English learners (ELs); and high needs students (an unduplicated count of students who are economically disadvantaged, students with disabilities, and/or ELs and former ELs). In order to report data for a subgroup, there must be results for at least 20 students.

Subgroup Results

For each subgroup in a district or school, performance against improvement targets will be reported using the criterion-referenced components described above. The overall accountability determination for a subgroup will be reported as the degree to which targets have been met.

In addition to the criterion-referenced component, each subgroup will also receive a subgroup percentile. The subgroup percentile measures the subgroup's relative standing compared to like subgroups statewide (e.g., by comparing results from the students with disabilities subgroup in one school to all other students with disabilities subgroups statewide). The subgroup percentile is calculated using the same process as the normative accountability percentile described above: by ranking data from all available accountability indicators for each subgroup and combining them into a single, final percentile value, from 1 to 99. This allows DESE to identify schools in which the performance of the school as a whole may be masking the performance of one or more low performing subgroups.

Assessment Participation

State and federal laws require high levels of student participation in statewide assessments. For each district, school, and subgroup, assessment participation rates will be calculated separately for ELA, mathematics, and science. In 2018, participation will be calculated two ways for use in accountability determinations. First, the 2018 participation rate for each subgroup in each subject will be calculated. If the actual 2018 participation rate is lower than 95 percent for any group in any subject, that rate will be compared to the average of the most recent two years of assessment participation data for that group and subject. The higher of the two resulting rates will be factored into the district's or school's overall accountability determination.

Graduation Rates

Federal law requires states to identify any school that does not graduate two-thirds of its students. Therefore, any district or school in which the most recent four-year cohort graduation rate is below 66.7 percent will be identified as requiring assistance or intervention.

Categorization of Schools

Beginning in 2018, school results will be reported in two categories: schools requiring assistance or intervention, and schools not requiring assistance or intervention.

Schools Requiring Assistance or Intervention

Schools requiring assistance or intervention will be identified as:

- In need of broad/comprehensive support, if they are designated underperforming or chronically underperforming, at the discretion of the Commissioner of Elementary and Secondary Education, or
- In need of focused/targeted support, if they have not been identified as in need of broad/comprehensive support, and:

- Are among the lowest 10 percent of schools statewide, as measured by the accountability percentile,
- Have one or more low performing subgroups, as measured by the subgroup percentile,
- Have low graduation rates (below 66.7 percent), and/or
- Have low assessment participation (below 95 percent) in the aggregate or for one or more subgroups in one or more subjects.

Schools Not Requiring Assistance or Intervention

A school that does not meet the criteria listed above will be identified as not requiring assistance or intervention. DESE will report results for these schools based on their overall performance against improvement targets, using the criterion-referenced component of the system. In 2018, schools will be reported as either *meeting targets*, if they have a criterion-referenced target percentage of 75 percent or higher, or *partially meeting targets* if they have a criterion-referenced target percentage below 75 percent. Beginning in 2019, schools will be reported as *meeting targets*, *partially meeting targets*, or *not meeting targets*.

Schools of Recognition

A subset of schools that are classified as not requiring assistance or intervention will be recognized for their academic accomplishments. Schools of recognition will be identified for demonstrating success or improvement in achievement, growth, and other areas, based on criteria established by DESE.

The table below shows how schools will be placed into accountability categories.

Schools without required assistance or intervention (approximately 85%)			Schools requiring assistance or intervention (approximately 15%)	
Schools of recognition	Meeting targets	Partially meeting targets	Focused/targeted support	Broad/comprehensive support
Schools demonstrating high achievement, significant improvement, or high growth	Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 0-74	<ul style="list-style-type: none"> • Schools with percentiles 1-10 not already identified for broad/comprehensive support • Schools with low graduation rate • Schools with low performing subgroups • Schools with low participation 	<ul style="list-style-type: none"> • Underperforming schools • Chronically underperforming schools

Categorization of Districts

Beginning in 2018, a district will no longer receive an accountability determination based on the performance of its lowest performing school. Instead, each district will be classified based on the results of the district as a whole and its lowest performing students, essentially treating the district like one large school. District results will be reported in two categories: districts requiring assistance or intervention, and districts not requiring assistance or intervention.

Districts Requiring Assistance or Intervention

A district requiring assistance or intervention will be identified as:

- In need of broad/comprehensive support, if it is designated underperforming or chronically underperforming, at the discretion of the Board of Elementary and Secondary Education, or
- In need of focused/targeted support, if it has not been identified as in need of broad/comprehensive support, and has:
 - Low graduation rates (below 66.7 percent), and/or
 - Low assessment participation (below 95 percent) in the aggregate or for one or more subgroups in one or more subjects.

Districts Not Requiring Assistance or Intervention

A district that does not meet the criteria listed above will be identified as not requiring assistance or intervention. DESE will report results for these districts based on their overall performance against improvement targets, using the criterion-referenced component of the system. In 2018, districts will be reported as either *meeting targets*, if they have a criterion-referenced target percentage of 75 percent or higher, or *partially meeting targets* if they have a criterion-referenced target percentage below 75 percent. Beginning in 2019, districts will be reported as *meeting targets*, *partially meeting targets*, or *not meeting targets*.

The table below shows how districts will be placed into accountability categories.

Districts without required assistance or intervention		Districts requiring assistance or intervention	
Meeting targets	Partially meeting targets	Focused/targeted support	Broad/comprehensive support
Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 0-74	<ul style="list-style-type: none"> • Districts with low graduation rate • Districts with low participation 	<ul style="list-style-type: none"> • Underperforming districts • Chronically underperforming districts