

Section 4: Accountability, Support, and Improvement for Schools

Instructions: Each SEA must describe its accountability, support, and improvement system consistent with section 1111(c) and (d) of the ESEA. Each SEA may include documentation (e.g., technical reports or supporting evidence) that demonstrates compliance with applicable statutory and regulatory requirements.

Maine's Core Priority of Coordinated and Effective State Support within Maine's Strategic Plan focuses on coordinated and equitable resources for Maine's schools and a robust and transparent accountability and improvement system to serve as the supportive framework for the ESSA plans in this section.

4.1 Accountability System.

An important caveat to this section of Maine's plan is that we have shifted from the New England Comprehensive Assessment Program for grades 3-8 and the SAT for grade 11 used in 2006-14, to Smarter Balance in 2015, to eMPowerME in 2016. We will not have a second year of student performance under eMPowerME until later this spring. Until Maine has data and can conduct simulations for combining multiple indicators to generate the summary measures of school performance, we present this section as a conceptual framework for the accountability system which we will launch at the end of the 2017-18 school year. Maine will be able to run simulations with two years of data by June 30, 2017 in order to finalize the actual weights.

A. Indicators. *Describe the measure(s) included in each of the Academic Achievement, Academic Progress, Graduation Rate, Progress in Achieving English Language Proficiency, and School Quality or Student Success indicators and how those measures meet the requirements described in section 1111(c)(4)(B) of the ESEA.*

- *The description for each indicator should include how it is valid, reliable, and comparable across all LEAs in the State,*
- *Indicator for Public Elementary and Secondary Schools that are Not High Schools (Other Academic Indicator). Describe the Other Academic indicator, including how it annually measures the performance for all students and separately for each subgroup of students. If the Other Academic indicator is not a measure of student growth, the description must include a demonstration that the indicator is a valid and reliable statewide academic indicator that allows for meaningful differentiation in school performance. Revised Template A.4.iv.(b)*

Maine's progress measure is a combination of achievement and progress on assessments which creates a unique measure that informs schools progress and identifies long term goals and interim measures. This progress measure is sensitive to different performance levels and provides adjustments for high performing versus low performing schools.

- *For measures within indicators of School Quality or Student Success that are unique to high school, the description must address how research shows that high performance or improvement on the indicator is likely to increase graduation rates, postsecondary enrollment, persistence, completion, or career readiness.*
- *the descriptions for the Academic Progress and School Quality or Student Success indicators must include a demonstration of how each measure aids in the meaningful differentiation of schools by demonstrating varied results across schools in the State.*

Indicators must be researched based, must have state-level data and definitions available, and must not be corruptible.

Exhibit 9. Measures Included in Indicators

Indicator	Measure(s)	Description
i. Academic Achievement	Proficiency rate as measured on the annual statewide assessments in English language arts, mathematics, using eMPowerME for Grades 3–8 and SAT for Grade 11 (eMPowerME is Maine’s 3-8 grade assessment name)	Percentage of students who are proficient in the annual statewide assessments
ii. Academic Progress	Progress as measured on the annual statewide assessments in English language arts, mathematics, using eMPowerME for Grades 4–8	Specific measures to be calculated as described below.
iii. Graduation Rate	Adjusted cohort graduation rates (four-year rate, as well as five- and six-year rates)	Use of weighted sum of 4 year and extended year graduation rates for each school
iv. Progress in Achieving English Language Proficiency	English Learner Progress	Specific measures to be calculated as described below.
v. School Quality or Student Success	K-12: Chronic Absenteeism	Percentage of students who are chronically absent (Explanation described below)

Maine’s Academic Progress Indicator Methodology

Feedback from USED (on section A.4.iv.b)

The SEA needs to describe the Other Academic indicator used in its statewide accountability system for public elementary and secondary schools that are not high schools, including how the SEA uses the same indicator and calculates it in the same way for all elementary and secondary schools that are not high schools, in all LEAs, across the State, except where the indicator may vary by each grade span. The state needs to provide more detail on the use of the quartiles, and on the application of the indicator to the subgroups. The indicator needs to be disaggregated for each subgroup of students.

Targets for Performance Level Change

Maine’s Academic Progress measure is computed based on a blended approach that incorporates both measures of academic proficiency and growth for the school. This approach was recommended by Maine’s Accountability Advisory Working Group and is based on the Student Learning Index (SLI) presented by AdvancED at the ESSA Symposium in September 2016. Key reasoning from the Accountability Advisory Working Group included the balance the blended approach provides in calculating the Academic Progress indicator for each school. This approach places more emphasis on proficiency for higher-achieving schools (who have less room to grow in terms of academic proficiency) and emphasizes growth for lower-achieving schools (who have more room to grow because of their lower academic proficiency). Maine is using a transition table for growth using data from both the current year and the previous year (see paragraph below for more information). This results in a potential ceiling effect as students improve along the continuum of performance and move beyond proficiency. While the highest performing-schools will still have an incentive to encourage student growth, this approach recognizes that schools are expected to prioritize progress toward proficiency. Therefore, Maine determined a distinction between higher- and lower-achieving schools and their capacity for growth is a valid concern and one which should be addressed.

One key reason that the Accountability Advisory Working Group recommended this approach is the balance it provides in calculating the Academic Progress indicator for each school. The approach places more emphasis on proficiency for higher achieving districts (who have less room to grow in terms of proficiency) and emphasizing growth for lower achieving districts (who have more room to grow because of their lower proficiency).

Under this approach, schools are divided into quartiles based on their proficiency in the content area (i.e., = ELA or mathematics). The quartile to which a school is assigned determines the weighting scheme for the proficiency and growth measures that are used in the Academic Progress calculation. The table below provides an example of the weighting scheme by quartile.

Example of Weighting Scheme for Maine’s Academic Progress Indicator

Proficiency Quartile	Weight for Academic Proficiency	Weight for Academic Growth
Top (76 th to 100 th percentile)	75%	25%
2nd (51 th to 75 th percentile)	55%	45%
3rd (26 th to 50 th percentile)	45%	55%
4th (1 st to 25 th percentile)	25%	75%

To calculate the Academic Progress indicator for a school, content area-specific progress measures (ProgressELA and ProgressMath) are first computed as follows:

$$ProgressELA = ProfELA \times w_{ELA_prof} + GrowELA \times w_{ELA_grow} \quad (1)$$

$$ProgressMath = ProfMath \times w_{Math_prof} + GrowMath \times w_{Math_grow} \quad (2)$$

where ProfELA and ProfMath are the proficiency rates (% at Level 3 or higher) for the school in the current year for ELA and mathematics respectively; and GrowELA and GrowMath are the growth scores for the school in ELA and mathematics respectively; $w_{ELA_proficiency}$ and $w_{Math_proficiency}$ are the weights assigned to the academic proficiency measure for ELA and math respectively (i.e., second column in Table above); and, w_{ELA_growth} and w_{Math_growth} are the weights assigned to the academic growth measure for ELA and math respectively (i.e., third column in Table above).

The overall Academic Progress indicator for the school is then computed as a weighted average of the content area-specific progress measures.

$$Academic\ Progress = (NELA \times ProgressELA + NMath \times ProgressMath) / (NELA + NMath) \quad (3)$$

where NELA and NMath are the number of full academic year (FAY) students in the school with academic growth scores in ELA and math respectively; while $Progress_{ELA}$ and $Progress_{Math}$ are the Academic Progress indicator scores for ELA and math respectively computed based on formulas (1) and (2).

Please note that, for all FAY elementary and middle school in Maine, the Academic Progress indicator is computed for all FAY students in the school (Total Student group) and also separately for each subgroup (i.e., Economically Disadvantaged, Students with Disabilities, English learners, Hispanic/Latino, American Indian/Alaskan Native, Asian, Native Hawaiian/Other Pacific Islander, Black/African, and White) that meet the minimum n-count of 10 based on FAY criteria (see Section 4.C.i.) In other words, for every elementary and middle school in the state, an Academic Progress indicator is calculated based on the Total student group as well as for each of the subgroups for which there are more than 10 students with academic growth measures in both ELA and mathematics. The minimum n-count of 10 is used to support the reliability of the academic achievement and growth scores, and therefore, the computed Academic Progress indicator.

As noted earlier, the academic growth measure is computed based on a transition table approach, using data from both the current year and the previous year. A complete description of the academic growth measure can be found on Maine's school report cards web page:

<http://www.maine.gov/doe/schoolreportcards/resources/methodology.html>. Districts and schools are familiar with this growth measure because it was implemented as part of Maine's School Performance Grading System in 2014.

As an example of how a school's Academic Progress indicator is computed, suppose that for the current year, School A has an ELA proficiency rate (% of students at or above Level 3) of 84% and a math proficiency rate of 67%. Further suppose that its ELA proficiency rate puts School A in the 91st percentile (i.e. top quartile) and its math proficiency rate puts School A in the 70th percentile (i.e., 2nd quartile). Finally, suppose School A has academic growth scores of 55 for ELA and 72 for math with n-

counts of 120 for ELA and 100 for math. School A’s content-area Progress measures would therefore be computed based on formulas (1) and (2) as:

- $Progress_{ELA} = 84 \times 0.75 + 55 \times 0.25 = 63 + 13.75 = 76.75$ (4)

- $Progress_{Math} = 67 \times 0.55 + 72 \times 0.45 = 36.85 + 32.4 = 69.25$ (5)

Note that the weights assigned to academic proficiency and growth measures for ELA in equation (4) are taken from the “top quartile” row in the Weight Table; while the weights assigned to the measures for math in equation (5) are taken from the “2nd quartile” row in the Weight Table. The overall Academic Progress indicator for School A is then calculated based on formula (3) and the content-area progress scores in equations (4) and (5) as:

- $Academic\ Progress = (120 \times 76.75 + 100 \times 69.25) / (120 + 100) = 73.34$

The Academic Progress indicator is also computed for each subgroup in School A with at least 10 students. The weights assigned to academic proficiency and growth measures are the same ones for each content area in the Total Student group. That is, for ELA, the weights for the “top quartile” group (75% for academic proficiency and 25% for academic growth) are used for all subgroups in School A; while for math, the weights for the “2nd quartile” group (55% for proficiency and 45% for growth) are used for all subgroups in School A. The reason for this rule is because for several subgroups, such as English learners, American Indian/Alaskan Native, Asian, and Native Hawaiian/Other Pacific Islander, very few elementary and middle schools have at least 10 students. Percentiles and quartiles that are determined based on a very small number of schools tend to be volatile and are therefore less reliable. As such, the content-area percentile ranks and quartiles for the Total Student group (which are based on all elementary and middle schools in the state) are used to determine the weights in the progress measure computation for each subgroup.

Please note that the weights in Table are illustrative. Maine DOE has been modeling its proposed accountability system, including the Academic Progress Indicator, with legacy data from the previous testing programs (i.e., NECAP and MHSA) as a proof of concept. Maine DOE is currently testing the system with data from its new assessments (i.e., eMPowerME, SAT and MSAA), using real data from the 2015-16 and 2016-17 administrations. The weights used in the Academic Progress computation will be finalized after results from the data modeling are validated for reasonableness and will be submitted to ED as part of an amendment to our Consolidated Plan.

Maine DOE will explore other college- and career-ready indicators and the necessary data sources and data definitions needed on the SEA level to measure those in a valid and reliable manner within the next year or so. In addition the Maine DOE will explore the viability of including science assessment and a social emotional measure for the 2018-19 school year to allow more robust indicators.

Feedback from USED

A.4.iii.c.2: Measurements of interim progress

The state needs to set interim goals for EL students demonstrating progress towards proficiency, rather than proficiency alone.

Progress in ELP Indicator for School Accountability

A school’s score on the Progress in ELP indicator in the accountability system is calculated by aggregating the growth index scores of all ELs who took ACCESS for ELLs in the current year and dividing by the total number of ELs. That is, the formula for computing a school Progress in ELP indicator is: