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| ESE Logo | Guide to Understanding the Annual Measurable Achievement Objectives (AMAOs) in Massachusetts in 2014 and Beyond  |

This document describes the methods for establishing Annual Measurable Achievement Objectives (AMAOs) for Title III districts in Massachusetts, beginning with reporting for the 2013−2014 school year.

# **Title III Districts in Massachusetts**

In 2014, there were 79 public school districts and district consortia that reported one hundred or more English language learners (ELLs) to the Department. This represents an increase of nineteen districts since 2013. In 2015, 81 districts and consortia reported one hundred or more ELLs. The Title III districts and consortia are listed in the appendices of this document.

**Background: ACCESS for ELLs Assessments**

Massachusetts has been a member of the World-class Instructional Design and Assessment (WIDA) consortium since May 2012. ACCESS for ELLs (“ACCESS”) tests have been administered each year beginning in 2013 to publicly-funded Massachusetts ELL students in grades kindergarten through grade 12. ACCESS assessments are developed by WIDA, which is based at the Wisconsin Center for Educational Research (WCER) at the University of Wisconsin. The assessments are based on the WIDA English language development standards and are aligned with the Common Core State Standards. WIDA has also developed an Alternate ACCESS assessment to measure the English proficiency of students with significant cognitive disabilities. The ACCESS tests are administered in Massachusetts schools during January and February each academic year to all ELL students in grades K–12, as required by the federal Title III law and Massachusetts Chapter 71A.

ACCESS test scores are reported as follows: *subscores* in each of four domains of the ACCESS tests (speaking, listening, reading, and writing); *composite scores* in comprehension (listening and reading), oral language (speaking and listening), and literacy (reading and writing); and an *overall composite* *score*.

# **Annual Measurable Achievement Objectives (AMAOs)**

Massachusetts is required under Title III of the No Child Left Behind (NCLB) law to establish AMAOs for the English language acquisition and academic achievement of students who are classified as English language learners in Title III districts. AMAOs are established for students in grades K–12 in three categories: (1) progress toward acquiring English language proficiency from one year to the next; (2) attainment of English proficiency; and (3) performance by the ELL and former ELL subgroup on statewide academic tests (i.e., either MCAS or PARCC in 2015; and possible transition to PARCC in 2016).

**AMAO 1: Progress Determinations and Targets**

# **Overview**

The revised approach for calculating AMAO 1 includes the use of Student Growth Percentiles for ACCESS (SGPAs) for each Massachusetts student that measures their relative growth one year to the next; and whether the student’s SGPA meets or exceeds the student’s specific Growth-to-Proficiency target to attain Level 5 on ACCESS within 6 years. This approach will allow the Department to:

1. Set growth-to-proficiency SGPA targets for Massachusetts students using historical data from other WIDA member states;
2. Determine whether each Massachusetts student’s growth on ACCESS was sufficient from one year to the next to be “on track” to attain English proficiency (i.e., Level 5 on the ACCESS test) in six years;
3. Determine whether each Massachusetts Title III district has made AMAO 1, based on a sufficient percentage of students meeting their growth-to-proficiency targets.

The following information describes in detail how AMAO 1 will be calculated:

* **Growth-to-proficiency targets** between 0−99 were calculated using the test results of ELLs who took the ACCESS tests from 2011 through 2014 in about 30 WIDA consortium states. Targets were based on the growth needed to reach English language proficiency (ACCESS Level 5) within six years.[[1]](#footnote-1) These targets will remain constant for 2014 and in future years. Growth-to-proficiency targets are listed in **Table 1** and are based on prior year ACCESS test results (Levels 1 through Level 6) and the number of years a student has attended a Massachusetts school.

Growth-to-proficiency targets represent the minimum SGPA needed by a student to attain English proficiency (i.e., Level 5 on ACCESS), given his or her prior number of years in a Massachusetts school and the student’s prior year’s proficiency level on the ACCESS assessment.

* **Student Growth Percentiles for ACCESS** (SGPAs) between 0−99 were then calculated for each Massachusetts student who took ACCESS tests in two successive years and compared with the Growth-to-Proficiency target for students at that proficiency level who have attended a Massachusetts school for one through five (or more) years.
* An ELL student is considered to have “made progress” if his or her current year’s SGPA is greater than or equal to the target listed in the appropriate area of the matrix shown in **Table 1**.
* If at least 50 percent of ELL students in a Title III district “made progress” by attaining their growth-to-proficiency targets in 2014, the district will have made AMAO 1. The district target will increase one percentage point each year, so that 51 percent of ELLs must attain their targets in 2015; 52 percent in 2016, etc.

**Rules for Calculating Growth-to-Proficiency Targets**

Massachusetts will calculate AMAO 1 based on the results of two administrations of ACCESS tests, including the current and most recent year of administration. All ELL students will be included and counted in AMAO 1 calculations, with the exception of “…students who have not participated in two administrations of a State’s annual ELP assessment…”[[2]](#footnote-2) and who therefore legitimately have only one data point for the purpose of determining progress for AMAO 1. We are referring here to students in Kindergarten, students who are in their first year in the U.S., and students who participated in the ACCESS or Alternate ACCESS test for the first time.

General decision rules for calculating SGPAs are described below.

* SGPAs are calculated using students’ current and prior year’s ACCESS results.
* To receive an SGPA, students must have a current and a prior ACCESS score, and must have been enrolled in consecutive grades for at least the current and the prior year.
* Students enrolled in a Massachusetts school for the current and prior years who do not receive an SGPA due to absence or being in non-consecutive grades will be counted as “not making progress.”

Students who participated in some, but not *all* portions of the ACCESS test (reading, writing, listening, and speaking), as well as students who were enrolled but absent for an entire test administration will be included, as follows:

* A student who does not have an overall composite ACCESS score for the **current** school year because he/she participated in *some, but not all* sections of the test; or was enrolled but absent for the entire test administration, will be counted and included as “not making progress;”
* A student who has an overall composite ACCESS score for the **current** school year, but does not have a composite overall ACCESS score for the **prior** school year because he/she participated in *some, but not all* sections of the previous year’s test; or was enrolled but absent for the entire prior year’s test administration, will be counted and included based on the calculation of progress from the results of the current and most recent ACCESS test administration for which an overall composite score can be determined; if an overall composite score cannot be determined from a previous year, the student will be counted as “not making progress.”

Data from the WIDA consortium (and in Massachusetts) indicate that ELL students require between 5−7 years on average to attain English proficiency. Therefore, six years was selected as the typical period of time for the attainment of English proficiency by an ELL student, and as the basis for the development of growth-to-proficiency targets. In each successive year in a U.S. school (1−5+), a student must attain (or exceed) the SGPA target listed in the matrix in **Table 1** that corresponds with a student at that proficiency level in order to be “on track” to reach Level 5 by the end of year 6. Note that the relatively high targets for students with 4+ prior years in Massachusetts who have prior ACCESS levels from 1-3 indicate the strong growth that is needed to reach proficiency within a relatively smaller number of years.

**Growth-to-Proficiency Targets**

The SGPA targets needed by a student in each category to make “growth to proficiency” are shown in **Table 1**.

**Table 1.**

**Growth to Proficiency Targets**

|  |  |  |
| --- | --- | --- |
|  |  | *SGPA Target by Prior Year Proficiency Level*  |
|  |   | *ACCESS Level 1* | *ACCESS Level 2* | *ACCESS Level 3* | *ACCESS Level 4* | *ACCESS Level 5* | *ACCESS Level 6* |
| *Prior Yrs in MA* | *1* | 50 | 49 | 41 | 33 | \* | \* |
| *2* | 60 | 55 | 42 | 33 | \* | \* |
| *3* | 66 | 57 | 37 | 30 | \* | \* |
| *4* | 86 | 79 | 64 | 49 | \* | \* |
| *5+* | 91 | 89 | 83 | 72 | \* | \* |

\* Students in Levels 5 and 6 are required to gain at least one point on the ACCESS vertical score scale AND remain at least in Level 5.

**Understanding the Matrix**

The growth-to-proficiency targets shown in **Table 1** indicate, for example, that:

* A student in Year 1 in a MA school who is at proficiency Level 3 must achieve an SGPA of 41 to be on target to attain proficiency in five remaining years.
* A student in Year 2 in a MA school who is at proficiency Level 4 must achieve an SGPA of 33 to be on target to attain proficiency in four remaining years.
* A student in Year 3 in a MA school who is at proficiency Level 2 must achieve an SGPA of 57 to be on target to attain proficiency in three remaining years.
* A student in Year 4 in a MA school who is at proficiency Level 1 must achieve an SGPA of 86 to be on target to attain proficiency in two remaining years.
* A student in Year 5+ in a MA school who is at proficiency Level 4 must achieve an SGPA of 72 to be on target to attain proficiency in one remaining year.

**Students in Proficiency Levels 5 and 6**

Students whose Prior Year Proficiency level was Level 5 or Level 6 and who were not exited from ELL status will not have a specific SGPA growth-to-proficiency target, since they have *already* attained Level 5 (English proficiency). Instead, **students in Levels 5 and 6 will be required to** **gain at least one point on the vertical scale of the ACCESS assessment** ***and* to remain at least in Level 5 in the current year** in order to meet their growth-to-proficiency targets.

**Growth-to-Proficiency Determinations for Students Who Took the Alternate ACCESS for ELLs**

Students taking the Alternate ACCESS assessment are also eligible to receive growth-to-proficiency determinations. Meeting the growth target on Alternate ACCESS is based on whether the student has increased his or her proficiency level subscore by at least .1 in *one or more subdomains* of the Alternate ACCESS assessment (i.e., either Listening, Speaking, Reading, or Writing). Only those students who participated in the Alternate ACCESS in both 2014 and 2015 will receive a growth-to-proficiency determination in 2015. Since Alternate ACCESS was first administered in 2014, no student will receive a determination until 2015.

**District Targets for AMAO 1**

Once SGPAs are calculated for each student, Massachusetts will apply the “making progress” rules to compare a student’s SGPA with his or her target listed in the growth-to-proficiency table for students taking the ACCESS assessments in successive years; and will apply the rules for students taking the Alternate ACCESS, to determine whether at least 50 percent of ELL students in a Title III district have met their growth-to-proficiency targets in 2014; whether at least 51 percent of ELLs met their targets in 2015 whether 52 percent in 2016, etc. When the percent of students meeting their targets has been met, the district will have made AMAO 1.

**AMAO 2: Attainment Determinations and Targets**

The ACCESS test scores are based on six composite English language proficiency levels, as follows.

1 = Entering

2 = Beginning

3 = Developing

4 = Expanding

5 = Bridging

6 = Reaching

Massachusetts considers a student at Level 5 to have “attained English proficiency” for the purpose of considering whether to transition a student from ELL to non-ELL status. A student who achieves a score of Level 5 on the ACCESS test is described as “able to understand and use oral or written language approaching comparability to that of English-proficient peers when presented with grade-level materials” (WIDA Consortium, 2014).

**State and District Attainment Targets**

The Department will calculate AMAO 2 by determining whether Title III districts have met or exceeded their district target for students attaining English proficiency. District attainment targets will be based on the statewide percentage of student who attained a score of Level 5 on the 2014 ACCESS tests, based on the number of years in a Massachusetts school. To maintain consistency from year to year, the **2014** ACCESS for ELLs scores will be used as the basis for calculating annual state and district attainment targets. The state targets will *not* be recalculated each year.

Statewide targets will be calculated based on students who have attended a Massachusetts school for 1, 2, 3, 4, and 5+ years. **Table 2** shows the statewide percentage of students who attained Level 5 in 2014, based on the number of years in a Massachusetts school. **Table 3** shows the annual statewide target percentages of students attaining proficiency (Level 5) between 2014 and 2020. The 2014 statewide target has been adjusted downward slightly from the statewide percentages (the “adjusted percentage”), to avoid minor errors in the assessment data. State and district targets are initially set at 1.5 percentage points below the 2014 statewide percentages in each number-of-years category. Beyond 2014, **these** **targets will increase annually** as required under Title III by adding 0.1 percentage point to the 2014 baseline targets in each number-of-years category. In each successive year, these new percentages will be used as the basis for determining district targets.

**Table 2.**

**Number and Percentage of Students Attaining ACCESS Level 5**

**Statewide by Number of Years in Massachusetts Schools (2014)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Years in MA** | **N/%** | **Proficiency Level <5** | **Proficiency Level ≥5** | **Total N** |
| 1 | Number | 17,199 | 1,014 | 18,213 |
| Percent | 94.4% | 5.6% | 100.0% |
| 2 | Number | 13,984 | 1,410 | 15,394 |
| Percent | 90.8% | 9.2% | 100.0% |
| 3 | Number | 10,088 | 2,102 | 12,190 |
| Percent | 82.8% | 17.2% | 100.0% |
| 4 | Number | 6,311 | 3,294 | 9,605 |
| Percent | 65.7% | 34.3% | 100.0% |
| 5+ | Number | 13,589 | 6,757 | 20,346 |
| Percent | 66.8% | 33.2% | 100.0% |
| TOTAL | Number | 61,171 | 14,577 | 75,748 |
| Percent | 80.8% | 19.2% | 100.0% |

**Table 3.**

**Annual Statewide Attainment Targets Beginning in 2014**

|  |  |
| --- | --- |
| **Number of years student has been enrolled in a Massachusetts school** | **Annual Statewide Attainment Targets** **Target percentage of students attaining proficiency (Level 5)**Adjusted percentage is set 1.5 percentage points below 2014 statewide averages in Table 2, and increases by 0.1 percentage point each year. |
| **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| 1 | 4.1% | 4.2% | 4.3% | 4.4% | 4.5% | 4.6% | 4.7% |
| 2 | 7.7 | 7.8 | 7.9 | 8.0 | 8.1 | 8.2 | 8.3 |
| 3 | 15.7 | 15.8 | 15.9 | 16.0 | 16.1 | 16.2 | 16.3 |
| 4 | 32.8 | 32.9 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 |
| 5+ | 31.7 | 31.8 | 31.9 | 32.0 | 32.1 | 32.2 | 32.3 |

**Table 4** shows how the 2014 district attainment target was calculated for a sample district, based on the number of ELL students in each number-of-years category in the district. The use of a “composite district attainment target” (i.e., an overall target) would allow districts to meet their attainmenttarget, even when one or more of their number-of-years targets was not met.

Massachusetts has proposed this approach for calculating attainment so that districts with large numbers of “newcomers” are not unfairly penalized when compared with districts with a higher proportion of longer-term ELLs.

**Table 4.**

**Calculation of a Sample District’s 2014 Attainment Target**

|  |  |  |  |
| --- | --- | --- | --- |
| **Years in MA** | **Number of Students by Years in MA** | **District Target by Years in MA****(from table above)** | **Target Number of Students Who Must Attain Proficiency****(Multiply Column 2 X Column 3)** |
| 1 | 25 | 4.1% (.041) | 1.0 |
| 2 | 40 | 7.7% (.077) | 3.1 |
| 3 | 60 | 15.7% (.157) | 9.4 |
| 4 | 70 | 32.8% (.328) | 23.0 |
| 5+ | 80 | 31.7% (.317) | 25.4 |
| **TOTAL** | **275** |  | **61.9** |
| **Composite Target for ALL Students in the District to Attain Proficiency = 61.9/275 = 22.5%** |

Please note that, for the first time, Massachusetts will also include a requirement that at least **95 percent of ELLs in the district participate in the ACCESS tests** in order to be eligible to meet the AMAO 2 targets.

**Alternate ACCESS Attainment Targets**

The Alternate ACCESS for ELLs is reported in six proficiency levels, as follows.

A1 = Initiating

A2 = Exploring

A3 = Engaging

P1 = Entering

P2 = Emerging

P3 = Developing

The three highest proficiency levels on ACCESS ALT (P1, P2, P3) coincide with the first three proficiency levels for the standard ACCESS tests (Levels 1, 2, and 3), but the scale does not extend as high as Level 5, the score considered “attainment of English proficiency.” Consequently, students taking the Alternate ACCESS will be included in the AMAO 2 calculation as “not attaining English proficiency.”

**AMAO 3: Performance of the ELL/Former ELL Subgroup on MCAS/PARCC**

# **Background: “Progress and Performance Index” (PPI)**

The state will use each district’s four-year cumulative Progress and Performance Index scores for the ELL/Former ELL subgroup to determine AMAO 3.

The State’s Title I accountability system measures each school’s progress toward the goal of reducing proficiency gaps by half between the 2010−2011 and 2016−2017 school years. Under the state’s 2012 ESEA Flexibility Waiver, AYP in Massachusetts was replaced by a **four-year cumulative Progress and Performance Index (PPI)**. The cumulative PPI is a measure of progress toward narrowing proficiency gaps that incorporates a combination of:

* MCAS scores in ELA, Mathematics, and STE (Composite Performance Index, or CPI);
* Student growth in ELA and Mathematics (Student Growth Percentile, or SGP); and
* High school graduation and dropout rates

The annual PPIs from the four most recent years are combined into a four-year cumulative PPI, weighted in favor of the more recent year(s). Massachusetts uses the *cumulative* Progress and Performance Index (PPI) to review whether a district has met its accountability targets because it is a stable measure and fluctuates only incrementally from one year to the next**. The cumulative PPI will used as the measure for determining AMAO 3 for the ELL/former ELL subgroup.**

Districts, schools, and subgroups are expected to demonstrate growth in student achievement on MCAS (and PARCC, if adopted in 2016) each year between 2011 and 2017. The cumulative PPI combines information about narrowing proficiency gaps, growth, and graduation and dropout rates into a number between 0 and 100. **A cumulative PPI of 75 or higher indicates that a group, school, or district is on track toward meeting its proficiency gap-narrowing goals**, based on the following scale:

* 100 Above target
* 75 On target
* 50 Improved below target
* 25 No change
* 0 Declined

REFERENCES

Betebenner, D. (Winter 2009). Norm- and criterion-referenced student growth. *Educational Measurement: Issues and Practice, 28*:4, pp. 42-51.

Betebenner, D. (2012). *An Overview of the Student Growth Percentile Methodology*. Presentation given to the MCAS Technical Assistance Committee, October 25, 2012.

Betebenner, B., Diaz-Bilello, E., Marion, S., & Domaleski, C. (2014, October 27). *Using Student Growth Percentiles During the Assessment Transition: Technical, Practical, and Political Implications*. Council of Chief State School Officers. Retrieved from: http://www.nciea.org/publication\_PDFs/Using%20Student%20Growth%20Percentiles%20During%20the%20Assessment%20Transition%20SM14.pdf

Cook, G. H., Boals, T., Wilmes, C., & Santos, M. (2008). *Issues in the Development of Annual Measurable Achievement Objectives for WIDA Consortium States.* Wisconsin Center for Education Research, Working Paper No. 2008-2. Retrieved from: <http://www.wcer.wisc.edu/publications/workingpapers/working_paper_no_2008_02.pdf>

Cook, G., Linquanti, R., Chinen M., & Jung, H. (2012). *National Evaluation of Title III Implementation Supplemental Report: Exploring Approaches to Setting English Language Proficiency Performance Criteria and Monitoring English Learner Progress*. Manuscript Submitted to: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. Retrieved from: <http://www.air.org/sites/default/files/downloads/report/Final_version_for_Release_Title_III_Exploratory_Report_020112_630pm_0.pdf>

Cook, G. H. (2015). *What Does Alt ACCESS Growth Look Like Across WIDA?* Research presented at WIDA Consortium Board Meeting (in press). The Board of Regents of the University of Wisconsin System, on behalf of the WIDA Consortium.

**APPENDIX A**

79 Massachusetts districts reporting at least 100 English Language Learners in 2014:

|  |  |
| --- | --- |
| Acton | Norwood |
| Agawam | Peabody |
| Amherst | Quincy |
| Andover | Randolph |
| Arlington | Revere |
| Attleboro | Salem |
| Barnstable | Shrewsbury |
| Belmont | Somerville |
| Boston | Southbridge |
| Braintree | Springfield |
| Brockton | Stoughton |
| Brookline | Taunton |
| Cambridge | Waltham |
| Chelmsford | Watertown |
| Chelsea | Westborough |
| Chicopee | Westfield |
| Clinton | West Springfield |
| Dedham | Weymouth |
| Everett | Winchester |
| Fall River | Winthrop |
| Fitchburg | Woburn |
| Framingham | Worcester |
| Gardner | Lawrence Family Development Charter  |
| Haverhill | Lowell Community Charter  |
| Holyoke | MATCH Community Day Charter  |
| Hudson | Seven Hills Charter  |
| Lawrence | Prospect Hill Academy Charter  |
| Leominster | Dennis-Yarmouth |
| Lexington | Greater Lowell Regional Vocational Technical |
| Lowell | Northborough-Southborough |
| Lynn | Ashland |
| Malden | Cape Cod Collaborative |
| Marlborough | Community Day Charter Public |
| Medford | Collaborative for Educational Services |
| Methuen | Dartmouth |
| Milford | EDCO Collaborative |
| Nantucket | Lower Pioneer Valley Educational Collaborative |
| New Bedford | Milton-Canton |
| Newton | North River Collaborative |

**APPENDIX B**

81 Massachusetts districts reporting at least 100 English Language Learners in 2015:

|  |  |
| --- | --- |
| Acton-Boxborough | Norwood |
| Agawam | Peabody |
| Amherst | Pittsfield |
| Andover | Quincy |
| Arlington | Randolph |
| Attleboro | Revere |
| Barnstable | Salem |
| Belmont | Shrewsbury |
| Boston | Somerville |
| Braintree | Southbridge |
| Brockton | Springfield |
| Brookline | Stoughton |
| Cambridge | Taunton |
| Chelmsford | Walpole |
| Chelsea | Waltham |
| Chicopee | Watertown |
| Clinton | Westborough |
| Dartmouth | Westfield |
| Dedham | West Springfield |
| Everett | Weymouth |
| Fall River | Winchester |
| Fitchburg | Winthrop |
| Framingham | Woburn |
| Gardner | Worcester |
| Haverhill | Lawrence Family Development Charter |
| Holyoke | Lowell Community Charter |
| Hudson | MATCH Community Day Charter |
| Lawrence | Seven Hills Charter |
| Leominster | Prospect Hill Academy Charter |
| Lexington | Dennis-Yarmouth |
| Lowell | Wachusett Regional |
| Lynn | Greater Lowell Regional Vocational Technical |
| Malden | North River Collaborative |
| Marlborough | Collaborative for Educational Services |
| Medford | Community Day Charter Public |
| Methuen | Ashland |
| Milford | Northborough-Southborough |
| Nantucket | EDCO Collaborative |
| New Bedford | Martha's Vineyard |
| Newton | SEEM Collaborative |
|  | Milton-Canton |  |

1. Growth-to-proficiency targets were generated based on consortium-level data provided by the WIDA consortium. WIDA research staff provided the Department with a set of “growth coefficient matrices” that indicated the growth of students in WIDA member states who took ACCESS tests (all four subdomain tests) in two successive years anytime between 2011 and 2014. [↑](#footnote-ref-1)
2. “A State is not required to include in its AMAO 1 calculation Title III-served LEP students who have not participated in at least two administrations of a State’s annual ELP assessment…” (Notice of Final Interpretations, p. 61835, October 2008) [↑](#footnote-ref-2)