

Proposed Changes to Michigan ESSA State Plan – Excerpts for Public Comment  
January 16, 2020

**THIS SECTION CORRESPONDS WITH PP. 33-37 IN MICHIGAN'S APPROVED ESSA STATE PLAN.  
RELEVANT CHANGES ARE HIGHLIGHTED IN YELLOW.**

- e. School Quality or Student Success Indicator(s). Describe each School Quality or Student Success Indicator, including, for each such indicator: (i) how it allows for meaningful differentiation in school performance; (ii) that it is valid, reliable, comparable, and statewide (for the grade span(s) to which it applies); and (iii) of how each such indicator annually measures performance for all students and separately for each subgroup of students. For any School Quality or Student Success indicator that does not apply to all grade spans, the description must include the grade spans to which it does apply.

**Response**

Michigan proposes a five-part additional indicator component:

- i. K-12 Chronic Absenteeism
- ii. K-8 Access to Fine Arts, Music, and Physical Education
- iii. K-8 Access to a Librarian/Media Specialist
- iv. 11th-12th Grade Advanced Coursework and
- v. High School Postsecondary Enrollment Rate.

The School Quality/Student Success indicator is based on a 0-100 point, percent of target met index. It is the building's average percent of school quality/student success targets met, averaged across student groups and each of the applicable school quality/student success subcomponents.

Each of the individual sub-indicators are also based on 0-100 point, percent of target met indices. The individual sub-indicator indices are calculated separately and then combined into a single school quality indicator index by a weighted average using the weights below. If a sub-indicator does not have enough data to be included then its weighting is redistributed proportionally amongst the remaining school quality sub-indicators such that the remaining sub-indicators retain their relative proportion to one another.

Michigan is setting long-term goals for each sub-indicator of the School Quality/Student Success indicator using the same methodology as the other indicators used in calculating an overall index – that is, long-term goals are set at the 75<sup>th</sup> percentile of the statewide average for each sub-indicator using 2016-17 as the baseline year. Long-term goals are aligned to the state's timeframe for its Top 10 in 10 initiative, meaning the expectation is for the long-term goal to be attained by 2024-25.

**School Quality/Student Success Sub-indicators and Weights**

School Quality Sub-Measure	Weight Within School Quality Indicator	Weight Within Overall System
K-12 Chronic Absenteeism	29%	4%

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School Quality Sub-Measure	Weight Within School Quality Indicator	Weight Within Overall System
K-8 Access to Arts/Physical Education	29%	4%
11-12 Advanced Coursework	21%	3%
Postsecondary Enrollment	14%	2%
K-8 Access to a Librarian or Media Specialist	7%	1%

The K-12 Chronic Absenteeism indicator uses a 100-point index and is calculated using all students enrolled in a school for at least 10 days. At least 10 students must be enrolled for this indicator to be calculated. Calculations are done for all valid subgroups (n-size 30 or greater). Chronic absenteeism is defined as missing at least 10% of a student’s scheduled enrollment. The indicator will use the inverse of this measure, in order to positively align to the 0-100 indices calculated for the other indicators in the index system. That is, the index will indicate the number of students not chronically absent within a school. The long-term goal for this indicator is set by finding the 75<sup>th</sup> percentile of the 2016-17 statewide average of not chronically absent students. This equates to 92.37% of students not being chronically absent within a school. Research cited in Appendix D shows this to be a valid measure.

The K-8 Access to Arts/Physical Education Indicator uses a 100-point index. This measure is the ratio of students to educators instructing courses in the fine arts (dance, music, theater or performance and visual arts) and physical education (defined as health, physical education, recreation and sex education). Educator full-time equivalency (FTE) values are used in the computation of the ratio. At least 10 students need to be enrolled for this measure to be calculated. Calculations are done for all valid subgroups (n-size 30 or greater). This measure is calculated for all K-8 schools. The long-term goal for this sub-indicator is set by finding the 75<sup>th</sup> percentile of the 2016-17 statewide average of the student to educators instructing courses in the fine arts and physical education. This equates to a ratio of 145:1 within each school containing any grade levels K-8. The expectation will be for students to have increased access to these educators, realized through attaining the long-term goal by 2024-25. Analysis has shown ratios to be somewhat normally distributed with ratios ranging from 10 to 1100 students per FTE for roughly 98% of K-8 schools. The average is approximately 340 students per FTE, which is less than one FTE per average Michigan school enrollment of 237 students. All K-8 buildings in Michigan currently have at least a partial Arts/PE educator FTE, making this a valid and comparable statewide measure. The variation in ratios centered around an average slightly higher than the average building size allows for meaningful differentiation throughout the state. Research cited in Appendix D provides evidence for the use of this measure.

The K-8 Access to a Librarian or Media Specialist indicator uses a 100-point index to indicate student access to librarians and media specialists. As above, staff full time equivalency (FTE) values

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are used to compute a ratio of students to staff employed as librarians or media specialists. A minimum of 10 students need to be enrolled for the ratio to be calculated. All valid subgroups (n-size 30 or greater) will have a calculated value. The long-term goal for this sub-indicator is set by finding the 75<sup>th</sup> percentile of the 2016-17 statewide average of the students to staff employed as librarians or media specialists. This equates to a ratio of 8312.50:1 within each school containing any grade levels K-8. The expectation will be for students to have increased access to these staff, realized through attaining the long-term goal by 2024-25. Almost all (99.6%) of K-8 schools have at least a partial librarian/media specialist FTE, making this a valid and comparable statewide measure. Analysis has shown ratios ranging from 123 to 4000 students per FTE for roughly 97% of K-8 schools, with an average ratio of roughly 880 students per FTE. The current data support the reality in many districts where librarians and media specialists are spread thinly amongst multiple buildings. The distribution of ratios amongst virtually all K-8 schools allows for meaningful statewide differentiation and additional years of data should display increasingly greater differentiation. As schools become more aware of the implications of how they report school librarians, more partial FTEs are expected to be reported for librarians in Michigan schools, driving increased differentiation. Research cited in Appendix D provides evidence for the use of this measure.

The 11-12 Advanced Coursework indicator uses a 100-point index. This measure is the percentage of all 11<sup>th</sup> and 12<sup>th</sup> grade students in the school successfully completing advanced coursework (Dual Enrollment, Early Middle College, Career and Technical Education (CTE), Advanced Placement (AP), and International Baccalaureate (IB)). At least 10 students need to be enrolled for this measure to be calculated. The long-term goal for this sub-indicator is set by finding the 75<sup>th</sup> percentile of the 2016-17 statewide average of the students successfully completing advanced coursework. This equates to 49.82% of 11<sup>th</sup> and 12<sup>th</sup> grade students successfully completing advanced coursework within each high school. The expectation will be for students to have increased success in completing advanced coursework in their 11<sup>th</sup> and 12<sup>th</sup> grade years. This will be realized through attaining the long-term goal by 2024-25. An analysis of students enrolled in 11<sup>th</sup> or 12<sup>th</sup> grade in 2015-16 shows a bi-modal distribution with just under half of schools with 11<sup>th</sup> and 12<sup>th</sup> grades (557 or 47%) having less than 19% of students successfully completing advanced coursework. Roughly 38% or 454 schools have between 40% and 79% of enrolled 11<sup>th</sup> and 12<sup>th</sup> grade students successfully completing advanced coursework. Of the 557 schools having less than 19% of students, 358 had no students successfully completing advanced coursework. Access to advanced coursework options was a stakeholder concern, particularly for small or rural schools, however all students in Michigan have access to 55 regional career and technical education centers and programs throughout the state, as well as Michigan Virtual, a non-profit school which offers 22 AP classes online as part of its virtual course catalog. Additionally, 377 Michigan high schools currently offer access to an Early Middle College Program, which can culminate with the student earning an Associate's degree. These programs and courses are available to all Michigan students, either locally or virtually, and are valid, reliable, and comparable measures. Analysis has shown from 0-100% of a school's students successfully completing advanced coursework, making this a meaningfully differentiated measure. Calculations are done for all valid subgroups (n-size 30 or greater). Research cited in Appendix D shows this to be a valid measure.

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Finally, Postsecondary Enrollment will be calculated for each high school, and will leverage Michigan’s longitudinal postsecondary data and reporting to represent the percentage of students enrolling in postsecondary education within key time points. Postsecondary enrollment within 12 months after graduation from high school is calculated for high school graduates of all public schools in Michigan, matching against Michigan’s Student Transcript and Academic Record Repository (STARR) Collection, and national college enrollment data from the National Student Clearinghouse (NSC). A limitation of the NSC is that most, but not all colleges and universities across the country provide data to NSC. If a Michigan public high school graduate attends one of the colleges and universities that does not provide data to NSC, this could result in inaccurate college enrollment totals for a school. High school graduation data is collected from Michigan high schools after the high school year closes, and are matched against college enrollment records in STARR and NSC. Demographic categories for postsecondary enrollment (gender, race/ethnicity, economically disadvantaged, English language learners, homeless, migrant, and student with disabilities) are based on the student’s high school record. MDE chose challenging but attainable goals for Postsecondary Enrollment, consistent with the methodology used to set goals within the overall Index system. The long-term goal for this sub-indicator is set by finding the 75<sup>th</sup> percentile of the 2016-17 statewide average of students enrolling in a post-secondary option within 12 months of graduating high school. This equates to 74.1% of students enrolling in a post-secondary option within 12 months of high school graduation. The expectation will be for students to have increased enrollment in post-secondary options, realized through attaining the long-term goal by 2024-25.

Analysis of two years of data (2013-14 and 2014-15) of public high school graduates in Michigan showed that there was differentiation of schools in the percentage of graduates enrolling in college (2 or 4 year) and universities both with “all students” included, as well as by subgroup. The percentage of high school graduates enrolling in postsecondary schooling within 12 months ranged from 0% to 100% of students for all students, as well as for each subgroup, providing further evidence of this indicator’s differentiation of public schools across Michigan. Research cited in Appendix D shows this to be a valid measure.

These indicators will also be used in the transparency dashboard where school, peer group, and state values will be reported.

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**Michigan Students Enrolled in Postsecondary Education within 12 Months of High School Graduation**

Percentage of “All Students” Within a High School Building Enrolled in Postsecondary Education within 12 Months of Graduation	Number of Schools (% of Total)  2013-14	Number of Schools (% of Total)  2014-15	Total  2013-2015
0-19	92 (9.47)	135 (13.55)	227 (11.53)
20-29	89 (9.16)	83 (8.33)	172 (8.74)
30-39	66 (6.79)	66 (6.63)	132 (6.71)
40-49	67 (6.89)	59 (5.92)	126 (6.40)
50-59	114 (11.73)	144 (14.46)	258 (13.11)
60-69	221 (22.74)	202 (20.28)	423 (21.49)
70-79	184 (18.93)	165 (16.57)	349 (17.73)
80-89	104 (10.70)	112 (11.24)	216 (10.98)
90-100	35 (3.60)	30 (3.01)	65 (3.30)
<b>Total</b>	<b>972</b>	<b>996</b>	<b>1,968</b>

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- v. Annual Meaningful Differentiation (*ESEA section 1111(c)(4)(C)*)
- a. Describe the State's system of annual meaningful differentiation of all public schools in the State, consistent with the requirements of section 1111(c)(4)(C) of the ESEA, including a description of (i) how the system is based on all indicators in the State's accountability system, (ii) for all students and for each subgroup of students. Note that each state must comply with the requirements in 1111(c)(5) of the ESEA with respect to accountability for charter schools.

**Response**

Michigan's index-based identification system designates a single index value (0-100 points) based on school performance in up to seven areas: Proficiency, Growth, Graduation Rate, English Learner Progress, School Quality/Student Success, General Participation, and English Learner Participation. The index system provides annual meaningful differentiation for all public schools. The School Quality/Student Success component includes a K-12 percent not chronically absent (students with on-track attendance) subcomponent, a K-8 student access to arts/physical education subcomponent and a K-8 student access to librarians/media specialists subcomponent, all three of which help ensure all schools, particularly K-2 schools, are included. In addition, the English Learner Progress component helps ensure all schools are included, regardless of grade level.

General Participation and English Learner Participation have standalone indicators in addition to non-participation in state assessments being included in the calculations used to determine proficiency and growth rates for subgroups and schools (as mentioned in these indicators' respective sections). The inclusion of standalone participation components was done to continue to provide transparency on a school's and subgroup's participation rates. The standalone participation indicators use a traditional calculation of valid assessment scores divided by the number of enrolled students during the appropriate assessment window. These indicators follow the same rules used for all other indicators within Michigan's index-based identification system – based on a percentage of the target met. These indicators use a set target of 95%, and any school meeting or exceeding the participation target will receive an index score of 100 for this indicator.

An overall index value is calculated based on a weighted average of a school's performance in the individual components. Component performance is calculated by finding the percentage of the component target met. This method allows for partial credit in meeting a target. All students and any valid subgroup (n-size 30 or greater) are included in the component calculation. Student subgroups are weighted equally and are averaged into a component level index value. Components, or indicators, are then averaged according to their weights to attain an overall summative index value. All public schools, including public charter schools are included in Michigan's identification system.

The following formula is used to calculate a school's overall index value:

$$\begin{aligned} & ( \text{Growth \% of Target Met} ) \times ( \text{Growth Weight} ) \\ & + ( \text{Proficiency \% of Target Met} ) \times ( \text{Proficiency Weight} ) \end{aligned}$$

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$$\begin{aligned} &+ (\text{School Quality \% of Target Met}) \times (\text{School Quality Weight}) \\ &+ (\text{Graduation Rate \% of Target Met}) \times (\text{Graduation Rate Weight}) \\ &+ (\text{English Learner (EL) Progress \% of Target Met}) \times (\text{English Learner (EL) Progress Weight}) \\ &+ (\text{CA Assessment Participation \% of Target Met}) \times (\text{CA Assessment Participation Weight}) \\ &+ (\text{ELP Assessment Participation \% of Target Met}) \times (\text{ELP Assessment Participation Weight}) \\ &\div (\text{Number of Components Having Data}) \times (\text{Sum of Weights from Components Having Data}) \end{aligned}$$

Initial modelling of Michigan’s index-based system shows a distribution of index values as follows (percentage/number schools): 90-100 = 23% (634); 80-89 = 29% (804); 70-79 = 22% (612); 60-69 = 13% (348); Below 60 = 14% (383).

In the transparency dashboard, information will be presented in each category. That information will be contextualized with three related values: state average, average of comparison schools, and the school’s average.

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- e. Targeted Support and Improvement. Describe the State’s methodology for annually identifying any school with one or more “consistently underperforming” subgroups of students, based on all indicators in the statewide system of annual meaningful differentiation, including the definition used by the State to determine consistent underperformance. (ESEA section 1111(c)(4)(C)(iii))

**Response**

Michigan will annually identify any school with one or more “consistently underperforming” subgroups of students by using the statewide accountability system described elsewhere in this application.

Any school that has one or more subgroups with index values in the bottom 25% within each applicable component will be identified as a Targeted Support and Improvement school.

- f. Additional Targeted Support. Describe the State’s methodology for identifying schools in which any subgroup of students, on its own, would lead to identification under ESEA section 1111(c)(4)(D)(i)(I) using the State’s methodology under ESEA section 1111(c)(4)(D), including the year in which the State will first identify such schools and the frequency with which the State will, thereafter, identify such schools. (ESEA section 1111(d)(2)(C)-(D))

**Response**

Michigan’s methodology for identifying schools for additional targeted supports starts with the population of schools initially identified as Targeted Support and Improvement schools. Targeted Support and Improvement schools that have any student subgroup performing at the same level as the lowest performing 5% of schools are identified as Additional Targeted Support schools. These schools have subgroups consistently underperforming across multiple measures, and MDE has chosen to consider multiple measures encompassing one year of data, using a composite indicator, rather than encompassing multiple years of data to define consistent underperformance.

Michigan will first identify Additional Targeted Support schools using data from the 2017-18 school year. Schools identified for additional targeted supports in 2017-18 will have five years to exit this status. Subsequent identifications of Additional Targeted Support schools will happen every six years, to align with Michigan’s cycle of identifying Comprehensive Support and Improvement schools.