



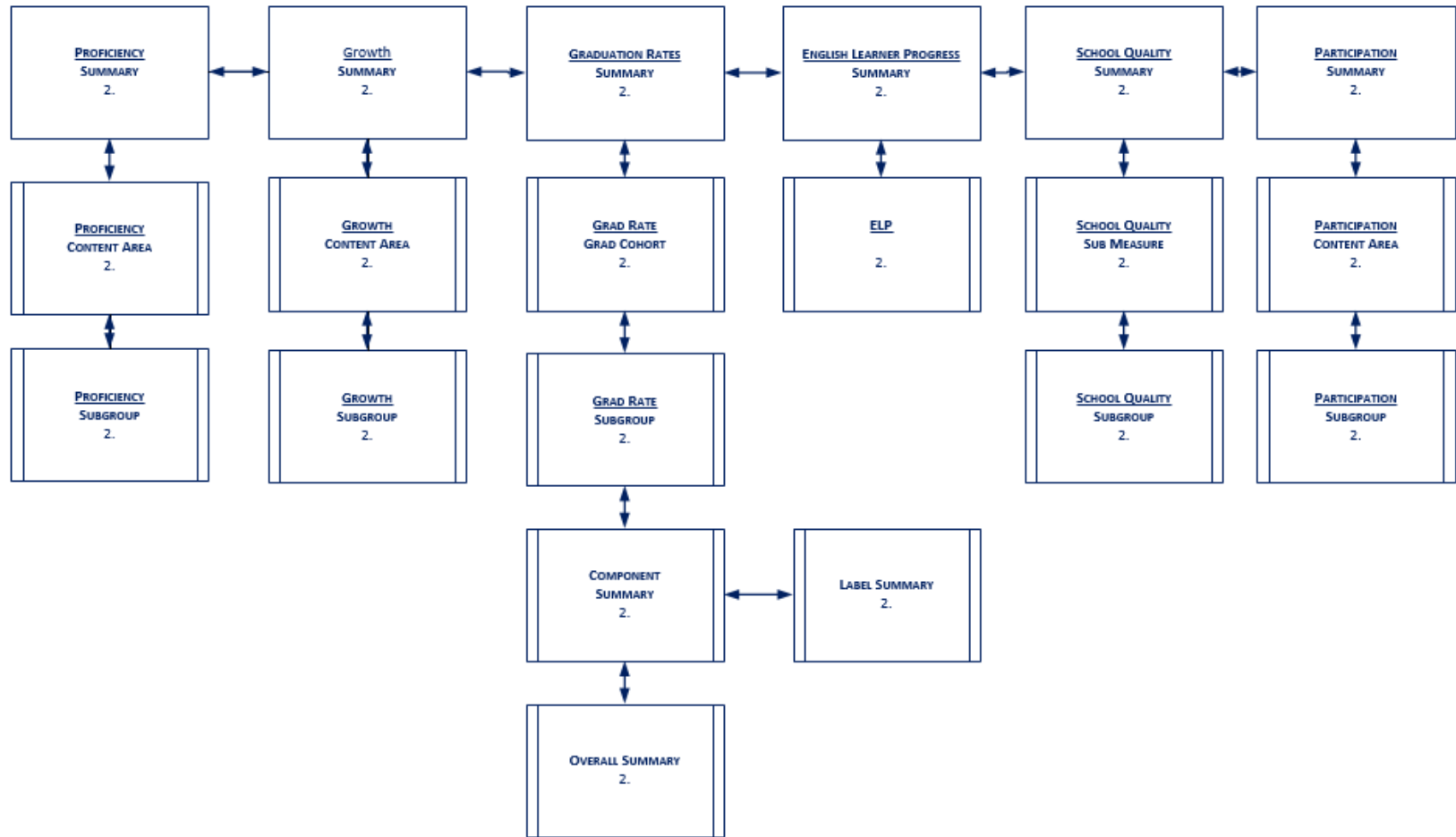
Michigan School  
Index System  
Business Rules

2018

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2018 Michigan School Index System  
Business Rules Document  
Michigan Department of Education  
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# 1 Michigan School Index System Components Diagrams



## 2 Accountability System Overview

### Introduction

The federal Every Student Succeeds Act (ESSA) replaces the No Child Left Behind (NCLB) Act and directs states to develop accountability systems to help provide all children the significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps.

The Michigan accountability system strives to balance numerous legal requirements, policies, and ideals. The system also seeks to balance accuracy and simplicity and be valid and reliable. The Michigan Department of Education (MDE) has worked to develop a single unified system that meets both state and federal requirements.

As part of the effort to ensure the equitable outcome for all students, ESSA continues the requirement that components in the accountability system be reported for the building overall and also be disaggregated for specific groups of students (ESSA 1111(c)(2))

*(c) STATEWIDE ACCOUNTABILITY SYSTEM.—*

*(1) IN GENERAL.—Each State plan shall describe a statewide accountability system that complies with the requirements of this subsection and subsection (d).*

*(2) SUBGROUP OF STUDENTS.—In this subsection and subsection (d), the term “subgroup of students” means—*

*(A) economically disadvantaged students;*

*(B) students from major racial and ethnic groups;*

*(C) children with disabilities; and*

*(D) English learners.*

Michigan’s accountability system is also aligned to the principles, goals, and strategies of the MDE Top 10 Education State in 10 Years initiative. Specifically:

- **Guiding Principle** – Data and accountability will be used to help drive resources and focus improvement activities for students and educators. Attention will be on transparency in support of key goals for the entire system to make Michigan a Top 10 state for education.
- **Goal** – Reduce the impact of high-risk factors, including poverty, and provide equitable resources to meet the needs of all students to ensure that they have access to quality educational opportunities.
- **Strategy** – Implement an assessment and accountability system that reduces the impact of high-risk factors while helping ensure equitable resources. This includes a state accountability and support system that focuses on transparency and high standards of accountability for all schools, and that holds schools accountable for closing achievement gaps while dramatically improving systems of support and capacity-building for struggling and chronically low-performing schools.

In the last 15 years, accountability has gone from the dichotomous and prescriptive system of Adequate Yearly Progress (AYP) under NCLB, covering only mathematics and English language arts, to less-prescriptive systems encompassing all assessed content areas and focused on closing achievement gaps, to today where there are familiar requirements and components with much more flexibility to develop a system that provides a more state-directed approach and fit.

### System Components Summary

#### Overview

There are seven components within the accountability system. Each component is based on a 0-100 point, percent of target met index. These components cover the five indicators required under ESSA, as well as the separate participation requirements for content area assessments and the English language proficiency assessment. This section describes each component briefly. Individual components are covered in detail in separate business rules documents.

## **Participation Components**

There are two standalone participation components within the accountability system. Both components function in the same manner, however they cover different assessments. One of these components covers the general assessments (currently M-STEP, MI-Access, and SAT) used to determine results within the proficiency and growth components. The other component covers the English language proficiency assessment (WIDA ACCESS for ELLs) used to determine results within the English Learner (EL) Progress component.

### **Proficiency Component**

The proficiency component aggregates student proficiency across the content areas of English language arts (ELA) and mathematics. Scores are included from M-STEP, SAT, and MI-Access assessments.

### **Growth Component**

The growth component aggregates the percent of students whose student growth percentiles (SGPs) meet or exceed their adequate growth percentile (AGP) growth target across the content areas of English language arts (ELA) and mathematics. SGPs are only calculated using scores from like assessments measuring the same content standards (e.g. M-STEP to M-STEP), and are only computed using SAT, M-STEP, or MI-Access Functional Independence (FI) scores.

### **Graduation Rate Component**

The graduation rate component uses the same adjusted cohort calculation used in previous accountability systems (required under ESSA). Four-, five-, and six-year cohort rates are calculated and used in determining an overall graduation rate for the school.

### **English Learner (EL) Progress Component**

The English Learner (EL) progress component is a new component under ESSA of the general accountability system. Previously under NCLB and ESEA flexibility, EL progress was monitored through a separate accountability system (AMAOs; Annual Measurable Achievement Objectives). ESSA instead folds in EL progress as a component of the larger accountability system. The EL progress component considers students showing progress if one of the following is demonstrated using the WIDA ACCESS for ELLs assessment:

Not currently English proficient but showing adequate growth

English proficient

Only the overall WIDA score is used in these calculations. In order for a WIDA score to be included, a student must have valid results in all four domains assessed (listening, speaking, reading, and writing). Unlike the other components, this component is not disaggregated by subgroup as it only applies to English Learner students.

### **Additional Indicator of School Quality/Student Success Component**

An additional indicator of school quality/student success is a new accountability system concept under ESSA. Michigan's accountability system is using five subcomponents within this component to represent school quality/student success. The subcomponents used are dependent on the school's grade configuration.

Schools with 11<sup>th</sup> and/or 12<sup>th</sup> grades:

On-Track Attendance (Not Chronically Absent Students)

11-12 Advanced Coursework: AP/IB/Dual Enrollment/CTE Program Completer

Postsecondary Enrollment

Schools without 11<sup>th</sup> and/or 12<sup>th</sup> grades:

Not Chronically Absent Students

Access to Arts/Physical Education

Access to a Librarian/Media Specialist

System-wide Settings and Concepts

### Inclusions/Exclusions

Typically, all students enrolled in a public school are included in the accountability system. Exclusions are made for students that are reported as non-public or homeschooled. The accountability system generally looks at students enrolled within assessed grades. For the M-STEP, MI-Access, and SAT, these grades include 3-8, and 11. Students reported as English Learners enrolled in grades K-12 are included in the English Learner Progress and Participation components. The School Quality/Student Success component includes students enrolled in all grades depending on the subcomponent.

Calculations for the various components and subgroups stick to a basic rule of thumb: 30 students are needed to create a valid subgroup included in accountability determinations, and 10 students are needed to display subgroup information. All schools are required to be included in the accountability system, regardless of enrollment size.

### Weighting Types

The accountability system uses both simple and weighted averages when aggregating the multiple content areas, graduation cohorts, student groups, sub-components, and components at different points in the process.

Weighted averages are used when the elements being combined are valued to differing degrees by policy makers. For example, components that include assessed content areas (Proficiency, Growth, and Participation) combine content area results by weighting them by the number of student records within the content area to get a weighted value for each student group. This ensures that content areas that are assessed in more grade levels (ELA and Math) are more heavily weighted throughout the system. The accountability system uses weighted averages to combine content areas, graduation cohorts, subcomponents, and components.

Simple, or unweighted, averages are used when all the elements being combined are valued equally. For example, student groups are always combined using simple unweighted averages. This is to ensure all students and the groups to which they belong receive equitable attention within the accountability system and to avoid replicating copies of the school's "All students" group.

### Component Weightings

ESSA requires the components of Proficiency, Growth, English Learner (EL) Progress, and Graduation Rate as a group be given "much more weight" than the School Quality component. To fulfil this requirement Michigan will use the component weightings given in the table below. Many schools will not have all seven components. When a component is missing (i.e., does not have enough data to be included) its weight is redistributed proportionally to the remaining components. This allows the remaining components to retain their relative weight to one another and therefore preserves the value placed on that component by policy makers.

Component	Initial Weight
Growth	34%
Proficiency	29%
School Quality/Student Success	14%
Graduation Rate	10%
English Learner Progress	10%
Participation (General)	2%
Participation (English Learners)	1%

## Summative Designations

### Overall 0-100 Index

The component weightings are used to combine individual component results into an overall 0-100 index for each school which is used to determine ESSA categories of support. Component-level index values used in the overall index are calculated by multiplying the percent of the goal met by the component's weight. Index values from each component are then summed to create an overall index value:

$$(Component\ Average\ Percent\ of\ Target\ Met) \times (Component\ Weight) = Component\ Index\ Value$$

### School Designations

ESSA establishes three categories of schools which states must identify and support in improving their outcomes. These categories are Comprehensive Support, Additional Targeted Support, and Targeted Support.

Comprehensive Support and Improvement (CSI) schools are those with the broadest and deepest challenges. This category is identified once every three years. Of the three categories, these schools will receive the greatest degree of support and interaction from the state. The school's district will need to work with the school, and possibly the state, to determine the unmet needs within the school and develop a plan to meet those needs. This plan will be monitored by the state educational agency (SEA). The district is given a state-determined amount of time to show improvement with the school and if sufficient progress has not been made then state-determined more rigorous actions must be taken.



Additional Targeted Support (ATS) schools have a deep challenge with three or more student subgroups. This category is identified once every three years. These schools will receive moderate support and interaction from the state. The school must identify the need of the identified student group(s) and work with their district to develop a plan to meet those needs. The plan will be monitored by the district. The school is given a state-determined amount of time to show improvement with the student subgroups and if sufficient progress has not been made then the school will become a CSI school.

Targeted Support and Improvement (TSI) schools have a moderate challenge with one or two student subgroups. This category is identified annually. Of the three categories, these schools will receive the least support and interaction from the state. The school must identify the need of the identified student group(s) and work with their district to develop a plan to meet those needs. The plan will be monitored by the district. The school is given a district-determined amount of time to show improvement with the student group and if sufficient progress has not been made then the district must determine what if any additional actions are appropriate.

### Long-Term Goal and Measures of Interim Progress

ESSA replaces the target terminology used in previous accountability systems with that of long-term goals and measures of interim progress. Michigan's long-term goal is to raise school averages to meet the statewide baseline year (typically 2016-17) values at the 75<sup>th</sup> percentile by the end of the 2024-25 school year. The year 2024-25 was chosen to align the accountability system long-term goals to the Top 10 in 10 goals.

### 3 Accountability System Components Details

#### Overview

There are seven components within the accountability system. Each component is based on a 0-100 percent target met index. The accountability system components are focused on school/building-level accountability. Intermediate School District (ISD) and District-level accountability is not required under Every Student Succeeds Act (ESSA), nor is it part of the accountability system.

Rule: The accountability system components are Student Proficiency, Student Growth, High School Graduation Rates, English Language Progress, School Quality, and Assessment Participation (general and EL).

*Refer to the Accountability Overall System Business Rules for more information on the Seven System Components.*

### 3.1 General Assessments Participation

#### Introduction

The general assessments participation component uses a 0-100 point, percent of target met, index. It is the building’s average percent of general assessments participation target met, averaged across content areas and student groups.

The validity of the accountability system results is dependent on the percentage of students that participated in the assessment and received a valid test score. This component evaluates whether the building/school overall, and each student subgroup independently, met the general assessments participation target (95% tested) in each content area. Student subgroups are evaluated separately for participation in a content area only if the number of enrolled students in that student subgroup in that content area reaches a minimum count (30 students).

Rule: The general assessments participation component is based on a 0-100 point, percent of target met, index.

Rule: Enrollment is the number of students to be tested in one or more content areas (accountable students).

Rule: General Assessments Participation Rate is the percentage of accountable students that are counted as participating in state general assessments.

#### General Assessments Rules

Rule: The General Assessment Participation component is only included in a school’s overall index calculation if there are at least 30 accountable students enrolled in the school.

Rule: There are three General Assessments – M-STEP, MI-Access, and SAT.

Rule: For the General Assessments, Target Participation Rate is 95%, required by federal law, and is applied to all assessments and content areas.

Rule: For the General Assessments, there are four Content Areas - Math (MA), English Language Arts (ELA), Science (SC), and Social Studies (SS).

Rule: For the General Assessments students are tested in the grades and content areas shown in the table below.

Content Area	Grade(s) Tested
English Language Arts	3-8, 11*
Mathematics	3-8, 11*
Science	4, 7, 11*
Social Studies	5, 8, 11*

\*12th grade students are counted in accountability calculations if they have not yet been counted as an 11th grader.



Rule: For the General Assessments assessment-specific content areas are used to fulfill the accountability content areas as described in the table below.

Assessment	Assessment Content Area	Fulfills Accountability Content Area
SAT	Evidenced-Based Reading and Writing (EBRW)	English Language Arts (ELA)
SAT	Mathematics	Mathematics
M-STEP	English Language Arts	English Language Arts (ELA)
M-STEP	Mathematics	Mathematics
M-STEP	Science	Science
M-STEP	Social Studies	Social Studies
MI-Access	Accessing Print and Expressing Ideas	English Language Arts (ELA)
MI-Access	Mathematics	Mathematics
MI-Access	Science	Science
MI-Access	Social Studies (FI Only)	Social Studies

Rule: Subgroups – There are 11 student subgroups for schools/buildings: All Students, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, Two or more races, Hispanic of any race, Economically Disadvantaged, English Learners (ELs), Students with Disabilities (SWD). This satisfies the ESSA requirement for data disaggregation for accountability purposes for the following subgroups: race/ethnicity, gender, socioeconomic status, disability, and ELs.

3.1.1 Determine student groups meeting minimum student counts:

Rule: For calculations, include only student groups (All Students group and/or subgroups) meeting the minimum n-size (30 students).

Rule: For public displays, include only student groups (All Students group and/or subgroups) having at least 10 or more students. That is, student groups having 10-29 students will be displayed publicly but not be included in aggregation calculations.

Rule: For secure displays (limited to authenticated users), include any student groups (All Students group and/or subgroups) having at least 1 or more students. That is, student groups having 1-9 students will be displayed securely but not displayed publicly nor included in aggregation calculations.

**General Assessments Participation Component Student Level Record Preparations**

Rule: Only students flagged as enrolled in Michigan Student Data System (MSDS) are included in a school/building participation rate.

Rule: The school flagged as the Primary Education Providing Entity (PEPE) in MSDS will be held accountable for testing the student.

Rule: Exclude Non-public school and homeschooled students.

Rule: Exclude early childhood (grade 30), adult education (grade 20), and special education transition (grade 14) students.

3.1.2 Exclude student records from content areas where they have an accepted Not Tested Reason for that content area:

Rule: For English Language Arts (ELA) only, for test exception of type EL exemption, student should be included and counted as tested.

*Dependency: The current academic year enrollment data is available for extraction from Center for Educational Performance and Information (CEPI).*

*Dependency: The current academic year valid test scores have been received from the vendor.*

3.1.3 MDE extracts current year student enrollment data available from CEPI/Michigan Student Data System (MSDS) using the student snapshot grouping associated with those assessments.

Rule: Schools have additional time to submit maintenance records to correct student demographics and report student exits after the official count day.

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- 3.1.4 MDE extracts current year entity data available from CEPI/ Educational Entity Master (EEM) using the entity snapshot grouping associated with those assessments.
- 3.1.5 MDE receives current year General Assessment test scores data from the vendors.
- 3.1.6 MDE merges CEPI/MSDS enrollment and demographic data, CEPI/EEM entity data, and vendor test score data and adds various data flags needed for accountability calculations.

**General Assessments Aggregation for each combination of Content Areas and Student Groups**

- 3.1.7 Calculate aggregate values for each content area and each student group.
  - Rule: Calculate the number enrolled by aggregating the number of accountable students for the content area and student group.
  - Rule: Calculate the number tested by aggregating the number of students with valid assessment results for that content area and student group.
  - Rule: Calculate the participation rate:  
 $(\text{Number Valid Tested}) \div (\text{Number Enrolled})$
  - Rule: Set the target participation rate = 95% (as required by federal law – ESSA)
  - Rule: Calculate [Percent of Target Met] for the content area and student group:  
 $(\text{Participation Rate}) \div (\text{Target Participation Rate})$
  - Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100.

**Example- General Assessment Participation Details- Science**

Combined	ELA	Mathematics	Science	Social Studies	English Learners
Student Group	# Enrolled	# Tested	% Tested	Participation	% Target Met
Building Overall	577	268	99.29		100.00
All Students	577	569	98.61		100.00
American Indian or Alaska Native ***	*	*	*		*
Asian	54	54	100.00		100.00
Black or African American	472	464	98.31		100.00
Bottom 30%	-	-	-		-
Economically Disadvantaged	429	424	98.83		100.00
English Learners	60	60	100.00		100.00
Hispanic of Any Race	42	42	100.00		100.00
Native Hawaiian or Other Pacific Islander	-	-	-		-
Students With Disabilities ***	*	*	*		*
Two or More Races	-	-	-		-
White ***	*	*	*		*

**General Assessments Aggregations for Student Groups (Across content areas)**

3.1.8 Aggregate participation indices, percent of target met, for each student group. Calculate student group weighted average participation indices (i.e., weighted percent of target met), for each student group (each subgroup and All Students group), using each content area within that student group meeting the minimum n-size.

Rule: Only use data from content areas meeting the minimum n-size.

Rule: Weight content area participation indices (percent of target met) by the percent of accountable student records in that content area. That is the number of accountable student records in that content area divided by the sum of all accountable student records for the student group for content areas meeting the minimum n-size.

Rule: Sum the products of content area indices and content area weight within each student group.

**Example- Participation Index Details – English Learners**

Combined	ELA	Mathematics	Science	Social Studies	English Learners
Student Group	# Enrolled	# Tested	% Tested	Participation % Target Met	
English Learners	125	125	100.00	100.00	
					English Learner Participation Index Value: 100.00

**General Assessments Aggregation to 0-100 Component Index (Across Student Group Averages)**

3.1.9 Aggregate student group average participation indices for a 0-100 General Assessment Participation Component Index.

Rule: Use only student groups which have a weighted average participation index.

Rule: Take the unweighted average of student group average participation indices. That is the sum of student group average participation indices divided by the number of student group average participation indices.

**Example- General Assessment Participation Summary**

Combined	ELA	Mathematics	Science	Social Studies	English Learners
Student Group	ELA Participation % Target Met	Math Participation % Target Met	Science Participation % Target Met	Social Studies Participation % Target Met	All Subjects Participation % Target Met
All Students	100.00	100.00	100.00	100.00	100.00
American Indian or Alaska Native	-	-	-	-	-
Asian	100.00	100.00	100.00	100.00	100.00
Black or African American ***	100.00	100.00	100.00	100.00	-
Bottom 30%**	-	-	-	-	-
Economically Disadvantaged	100.00	100.00	100.00	97.85	99.46
English Learners ***	100.00	100.00	100.00	90.22	-
Hispanic of Any Race ***	100.00	100.00	100.00	100.00	-
Native Hawaiian or Other Pacific Islander ***	*	*	*	*	-
Students With Disabilities ***	100.00	100.00	100.00	77.80	-
Two or More Races ***	100.00	100.00	100.00	97.17	-
White	100.00	100.00	100.00	100.00	100.00

## 3.2 Proficiency

### Introduction

The proficiency component uses a 0-100 point, percent of target met, index. It is the building’s average percent of proficiency target met, averaged across content areas and student groups. The proficiency component evaluates whether the building/school overall, and each student subgroup independently, met the proficiency target in each content area of the General Assessments (M-STEP, MI-Access, and SAT).

Proficiency is calculated by content area for any “all students” group having at least one valid FAY tested student and for any valid subgroups (those meeting the minimum number of students – 30 students) within a school. This is much like Michigan’s previous methodology used on the Accountability Scorecards. Further aggregation is done to determine overall subgroup performance and overall component performance. In order to satisfy the ESSA requirement that at least 95% of students are included in the proficiency calculations, participation rates are included in determining the percentage of the proficiency target met.

### Proficiency General Rules

Rule: The proficiency component is based on a 0-100 point, percent of target met, index.

Rule: There are three General Assessments – M-STEP, MI-Access, and SAT.

Rule: There are two Content Areas - Math (MA) and English Language Arts (ELA).

Rule: Proficiency Targets are different for each content area.

Rule: Students are tested in the grades and content areas shown in the table below.

Content Area	Grade(s) Tested
English Language Arts	3-8, 11*
Mathematics	3-8, 11*

\*12th grade students are counted in accountability calculations if they have not yet been counted as an 11th grader.

Rule: Assessment-specific content areas are used to fulfill the accountability content areas as described in the table below.

Assessment	Assessment Content Area	Fulfills Accountability Content Area
SAT	Evidenced-Based Reading and Writing (EBRW)	English Language Arts (ELA)
SAT	Mathematics	Mathematics
M-STEP	English Language Arts	English Language Arts (ELA)
M-STEP	Mathematics	Mathematics
MI-Access	Accessing Print and Expressing Ideas	English Language Arts (ELA)
MI-Access	Mathematics	Mathematics

Rule: Subgroups – There are 12 student subgroups for schools/buildings: All Students, Bottom 30%, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, Two or more races, Hispanic of any race, Economically Disadvantaged, English Learners, Students with Disabilities. This satisfies the ESSA requirement for data disaggregation for accountability purposes for the following subgroups: race/ethnicity, gender, socioeconomic status, disability, and English learners (ELs).

Rule: The Bottom 30% subgroup is used for reporting purposes only. It is not rolled into a school’s proficiency index value

#### 3.2.1 Determine student groups meeting minimum student counts:

Rule: For subgroups:

Rule: For subgroups meeting the minimum number of students (30), refer to as valid subgroups and include in all

aggregates (counts and rates) in secure displays, public displays, and aggregation calculations. Note that small schools will typically not have subgroups, just the “All Students” group.

Rule: For subgroups with less than the minimum number of students (30) but having 10 or more students, include in all aggregates (counts and rates) in secure displays and public displays, but do not include in aggregation calculations. That is subgroups having 10-29 students, results will be securely displayed and publicly displayed but not included in aggregation calculations.

Rule: For subgroups with less than 10 students, include in aggregates (counts and rates) ONLY for secure displays. Do NOT include in public displays nor in aggregation calculations. That is subgroups having 1-9 students will be displayed securely but not displayed publicly nor included in aggregation calculations.

Rule: For All Students group:

Rule: For All Students groups having at least 10 students, include in all aggregates (counts and rates) in secure displays, public displays, and aggregation calculations.

Rule: For All Students groups having less than 10 students, include in aggregates (counts and rates) in secure displays and aggregation calculations. For public displays, include the rate but do NOT publicly display the aggregate count - instead display “<10”.

### **Proficiency Component Student Level Record Preparations**

Rule: Only Full Academic Year (FAY) students count toward proficiency rates.

Rule: Only students flagged as enrolled are included in proficiency rates.

Rule: Student proficiency results are to be assigned to their Primary Education Providing Entity (PEPE).

Rule: Exclude Non-public school and homeschooled students.

Rule: Exclude early childhood (grade 30), adult education (grade 20), and special education transition (grade 14) students.

Rule: Exclude students from content areas where they are flagged as having a Non-Standard Accommodation or a Prohibited Behavior for that content area.

Rule: Exclude student records from content areas where they have an accepted Not Tested Reason for that content area:

*Note: Not Tested Reasons can and do vary by content area.*

*Dependency: The current academic year enrollment data is available for extraction from Center for Educational Performance and Information (CEPI)*

*Dependency: The current academic year valid test scores have been received from the vendor*

3.2.2 MDE extracts current year student enrollment data available from CEPI/Michigan Student Data System (MSDS) using the student snapshot grouping associated with those assessments.

Rule: Schools have additional time to submit maintenance records to correct student demographics and report student exits after the official count day.

3.2.3 MDE extracts current year entity data available from CEPI/ Educational Entity Master (EEM) using the entity snapshot grouping associated with those assessments.

3.2.4 MDE Receives current year General Assessment test scores data from the vendors.

3.2.5 MDE merges CEPI/MSDS enrollment and demographic data, CEPI/EEM entity data, and vendor test score data and adds various data flags needed for accountability calculations.

### **Aggregation for each combination of Content Areas and Student Groups**

3.2.6 Calculate aggregate values for each content area and each student group.

Rule: Aggregate the number of accountable FAY enrolled students for the content area and student group.

Rule: Aggregate the number of FAY enrolled student records counting as participating for the content area and student group.

Rule: Calculate FAY enrolled participation rate for the content area and student group:

$$[\text{Aggregate Number Counting as FAY enrolled Participated}] \div [\text{Aggregate Number of Accountable FAY enrolled}]$$

Students]

Rule: Aggregate the number of FAY Proficient for the content area and student group.

Rule: Aggregate the Percentage of FAY Proficient for the content area and student group

Rule: Calculate Participation Adjusted Proficiency Rate for the content area and student group.

Rule: If FAY Enrolled Participation Rate is < 95%, then multiply Percent FAY Proficiency Rate by FAY Enrolled Participation Rate. A more expanded way of showing this calculation would be:

$$(FAY\ tested / FAY\ enrolled) \times (FAY\ proficient / FAY\ tested)$$

Rule: If FAY Enrolled Participation Rate is >= 95%, then set Participation Adjusted Proficiency equal to Percent FAY Proficiency Rate.

Rule: In a target setting year, set the proficiency targets for each content area. In a non-target setting year, skip this rule and proceed to the next rule.

Rule: Use the dataset of all schools having Proficiency results.

Rule: Filter to only include All Students group.

Rule: Use the variable Participation Adjusted Proficiency Rate.

Rule: Determine the value at the 75th percentile of the distribution of Participation Adjusted Proficiency Rates, separately for each content area and set that to the content area proficiency target.

Rule: Calculate [Percent of Target Met] for the content area and student group:

$$(Participation\ Adjusted\ Proficiency\ Rate) \div (Target\ Proficiency\ Rate)$$

Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100.

Note: Current proposal only uses a single year of data (i.e., no multi-year averaging)

**Example- Proficiency Details – English Language Arts (ELA)**

Student Group	Combined		ELA		Mathematics		
	#FAY Enrolled	#FAY Tested	%FAY Tested	#Proficient	%Proficient	Participation Adjusted Proficiency	Proficiency % Target Met
Building Overall	272	-	-	-	75.57	75.57	100.00
All Students	272	270	99.26	215	79.63	79.63	100.00
American Indian or Alaska Native ***	*	*	*	*	*	*	*
Asian ***	*	*	*	*	*	*	*
Black or African American ***	21	20	95.24	11	55.00	55.00	91.67
Bottom 30%**	81	81	100.00	26	32.10	32.10	53.50
Economically Disadvantaged	66	64	96.97	42	65.63	65.63	100.00
English Learners ***	*	*	*	*	*	*	*
Hispanic of Any Race ***	*	*	*	*	*	*	*
Native Hawaiian or Other Pacific Islander ***	*	*	*	*	*	*	*
Students With Disabilities ***	27	27	100.00	5	18.52	18.52	30.87
Two or More Races ***	12	12	100.00	9	75.00	75.00	100.00
White	222	221	99.55	180	81.45	81.45	100.00

**Aggregations for Student Groups (Across content areas)**

3.2.7 Aggregate proficiency indices for each student group. Calculate student group weighted average proficiency indices (i.e., weighted percent of target met), for each student group (each subgroup and All Students group), using each content area within that student group meeting the minimum n-size.

Rule: Complete this aggregation for the Bottom 30% subgroup, which will be displayed but **NOT** included in the aggregation of student groups to a building aggregation.

Rule: Only use data from content areas meeting the minimum n-size (30 for subgroups, 1 for "All Students" group).

Rule: Weight content area proficiency indices (percent of target met) by the percent of accountable FAY enrolled student records in that content area. That is the number of accountable FAY enrolled student records in that content area divided by the sum of all accountable FAY enrolled student records for the student group for content areas meeting the minimum n-size.

Rule: Sum the products of content area indices and content area weight within each student group

**Example- Proficiency Index Details – Students With Disabilities**

<b>Proficiency Index Details - Students With Disabilities</b>				
<b>Content Area</b>	<b>Content Area Index (Percent of Target Met)</b>	<b>Content Area Number of FAY Enrolled Records</b>	<b>Content Area Weight (Percent of FAY Enrolled Records)</b>	<b>Content Area Weighted Points</b>
English Language Arts (ELA)	62.13%	200	49.8%	30.91
Math	90.01%	202	50.2%	45.23
				<b>76.14</b>

**Aggregation to 0-100 Component Index (Across Student Group Averages)**

3.2.8 Aggregate student group average proficiency indices for a 0-100 Proficiency Component Index

Rule: Use only student groups which have a weighted average proficiency index.

Rule: Exclude Bottom 30% student group from this aggregation.

Rule: Take the unweighted average of a student group average proficiency indices. That is take the sum of applicable student group average proficiency indices and divide by the number of applicable student groups with average proficiency indices.

**Example- Student Proficiency Summary**

Student Group	Combined	ELA		Mathematics	
		ELA Proficiency % Target Met	Math Proficiency % Target Met	All Subjects Proficiency % Target Met	
All Students		100.00	100.00		100.00
American Indian or Alaska Native ***		*	*		-
Asian ***		*	*		-
Black or African American ***		91.67	63.09		-
Bottom 30%**		53.50	0.00		26.75
Economically Disadvantaged		100.00	100.00		100.00
English Learners ***		*	*		-
Hispanic of Any Race ***		*	*		-
Native Hawaiian or Other Pacific Islander ***		*	*		-
Students With Disabilities ***		30.87	23.36		-
Two or More Races ***		100.00	100.00		-
White		100.00	100.00		100.00

**3.3 Growth**

**Introduction**

The Growth component uses a 0-100 point, percent of target met index. It is the building’s average percent of growth target met, averaged across content areas and student groups. The growth component evaluates whether the building/school overall, and each student subgroup independently, met the growth target in each content area of the General Assessments (M-STEP, MI-Access, and SAT).

**Student Growth Percentiles**

MDE uses Student Growth Percentiles (SGPs) to measure student growth on state assessments. SGPs describe a student’s learning over time compared to other students with similar prior test scores (i.e., their academic peers). In order to calculate SGPs, students are grouped with academic peers throughout the state who had comparable score patterns on past tests. Students in each academic peer group are then ordered based on their score on the current year test. Each student then receives a percentile rank, compared to their academic peers.

Like other percentile scores, SGPs range from 1-99, where a SGP of 50 indicates the student demonstrated growth greater than half of students with comparable score histories in that subject. Higher SGPs represent greater learning relative to academic peers and lower SGPs represent lesser learning relative to academic peers.

**Adequate Growth Percentiles**

While a quantitative measure of growth (SGPs) has some value on its own, the greater value comes when a student’s quantified growth (SGP) is compared to an adequate growth target, which is how much growth would be necessary for a student to reach proficiency in a set timeframe. Michigan’s measure of adequate growth is an adequate growth percentile (AGP) which is the student growth percentile (SGP) growth curve necessary for a student to consistently reach or exceed in order to attain proficiency in a set timeframe.

**Growth Component General Rules**

Rule: The growth component is based on a 0-100-point index, based on percent of target met.

Rule: There are three General Assessments – M-STEP, MI-Access, and SAT.

Rule: For MI-Access, SGPs are only calculated for Functional Independence (FI). SGPs are NOT calculated for MI-Access Supported Independence (SI) or MI-Access Participation (P) because the number of students taking those assessments is too small to calculate SGPs.



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Rule: There are two Content Areas - Math (MA) and English Language Arts (ELA).

Rule: Growth Targets are different for each content area.

Rule: Students are tested in the grades and content areas shown in the table below.

Content Area	Grade(s) Tested
English Language Arts	3-8, 11*
Mathematics	3-8, 11*

\*12th grade students are counted in accountability calculations if they have not yet been counted as an 11th grader.

Rule: Assessment-specific content areas are used to fulfill the accountability content areas as described in the table below.

Assessment	Assessment Content Area	Fulfills Accountability Content Area
SAT	Evidenced-Based Reading and Writing (EBRW)	English Language Arts (ELA)
SAT	Mathematics	Mathematics
M-STEP	English Language Arts	English Language Arts (ELA)
M-STEP	Mathematics	Mathematics
MI-Access	Accessing Print and Expressing Ideas	English Language Arts (ELA)
MI-Access	Mathematics	Mathematics

Rule: Student Growth Percentiles (SGPs) and Adequate Growth Percentiles (AGPs) are available for the content areas, assessments, and grades given in the table below.

Content Area	SAT	M STEP	MI Access FI <sup>1</sup>	MI Access (SI & P) <sup>2</sup>
English Language	11 <sup>3</sup>	4-8	4-8, & 11 <sup>3</sup>	N/A
Mathematics	11 <sup>3</sup>	4-8	4-8, & 11 <sup>3</sup>	N/A

<sup>1</sup>For MI-Access FI, due to smaller counts of students taking that test SGPs are available but calculated by different methods. Those methods cannot produce a meaningful AGP and so AGPs are set by policy for MI-Access FI.

<sup>2</sup>For MI-Access SI & P, the count of students participating in these assessments is too small to calculate SGPs or AGPs.

<sup>3</sup>12th grade students will not have SGPs or AGPs as their available data does not follow the standard grade progressions necessary to calculate SGPs and AGPs.

Rule: Subgroups – There are 12 student subgroups for schools/buildings: All Students, Bottom 30%, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, Two or more races, Hispanic of any race, Economically Disadvantaged, English Learners, Students with Disabilities. This satisfies the ESSA requirement for data disaggregation for accountability purposes for the following subgroups: race/ethnicity, gender, socioeconomic status, disability, and English learners (ELs).

Rule: The Bottom 30% subgroup is used for reporting purposes only. It is not rolled into a school’s growth index value.

Rule: Determine student groups meeting minimum student counts:

Rule: For subgroups:

Rule: For subgroups meeting the minimum number of students (30), refer to as valid subgroups and include in all aggregates (counts and rates) in displays and calculations. Note that small schools will typically not have subgroups, just the “All Students” group.

Rule: For subgroups with less than the minimum number of students (30) but having 10 or more students, growth is displayed, but not included in calculations.

Rule: For subgroups with less than 10 students, growth is not displayed nor included in calculations.

Rule: For All Students group:

Rule: For All Students groups having at least 10 students include in all aggregates (counts and rates) in displays and calculations.

Rule: For All Students groups having less than 10 students include in aggregate rates in displays and calculations. For aggregate counts do NOT report the aggregate count but instead display "<10".

Rule: Compute SGPs using SAT, M-STEP, or MI-Access FI Scores.

Rule: Calculate SGPs only using scores from Like Assessments - M-STEP to M-STEP, MI-Access FI to MI-Access FI.

Rule: SGPs range from 1-99, where a SGP of 50 indicates the student demonstrated growth greater than half of students with comparable score histories in that subject.

Rule: Only data from standard grade progressions will be used in calculating SGPs. That is, students who repeat or skip grades will not have SGPs that year.

### **Growth Component Student Level Record Preparations**

Rule: Only Full Academic Year (FAY) students are used in growth component calculations. Non-FAY students may receive an SGP and growth label but will not have their growth data included in report card calculations.

Rule: Only students for whom an SGP was expected are included in growth component calculations.

Rule: Students are expected to have an SGP if they are enrolled **AND** have at least a prior score in the SGP test sequence for their current grade. For example, a student currently enrolled in grade 4, who had a valid grade 3 ELA score in the previous year, would be expected to have an ELA SGP.

Rule: Only students flagged as enrolled are included in growth component calculations.

Rule: Student growth results are to be assigned to their Primary Education Providing Entity (PEPE).

Rule: Exclude Non-public school and homeschooled students.

Rule: Exclude early childhood (grade 30), adult education (grade 20), and special education transition (grade 14) students.

Rule: Exclude students from content areas where they are flagged as having a Non-Standard Accommodation or a Prohibited Behavior for that content area.

Rule: Exclude student records from content areas where they have an accepted Not Tested Reason for that content area.

Rule: The Michigan Department of Education (MDE) requires at least one prior test score to calculate an SGP but will use up to two prior years of data if available.

*Dependency: The current academic year enrollment data is available for extraction from Center for Educational Performance and Information (CEPI).*

*Dependency: The current academic year valid test scores have been received from the vendor.*

3.3.1 MDE extracts current year student enrollment data available from CEPI/ Michigan Student Data System (MSDS) using the student snapshot grouping associated with those assessments.

Rule: Schools have additional time to submit maintenance records to correct student demographics and report student exits after the official count day.

3.3.2 MDE extracts current year entity data available from CEPI/ Educational Entity Master (EEM) using the entity snapshot grouping associated with those assessments.

3.3.3 MDE Receives current year General Assessment test scores data from the vendors.

3.3.4 MDE merges CEPI/MSDS enrollment and demographic data, CEPI/EEM entity data, and vendor test score data and adds various data flags needed for accountability calculations.

### Aggregation for each combination of Content Areas and Student Groups

3.3.5 Calculate aggregate values for each content area and each student group.

Rule: Any student having an accepted Not Tested Reason for a content area will be excluded from all of the following aggregations for that content area.

*Note: Not Tested Reasons can and do vary by content area.*

Rule: Aggregate the number of accountable FAY enrolled students expected to have SGPs for each content area and student group:

Rule: Students are expected to have an SGP if they are enrolled AND have at least a prior score in the SGP test sequence for their current grade. For example, a student currently enrolled in grade 4, who had a valid grade 3 ELA score in the previous year, would be expected to have an ELA SGP.

Rule: Aggregate the number of accountable FAY enrolled students having a SGPs for the content area and student group.

Rule: Calculate FAY SGP participation rate for the content area and student group:

$$[\text{Aggregate Number Having SGPs}] \div [\text{Aggregate Number of FAY enrolled expecting SGPs}]$$

Rule: Aggregate the number of students meeting adequate growth (i.e. the number of students where their SGP >= their AGP).

Rule: Calculate adequate growth rate:

$$(\text{Aggregate number meeting adequate growth}) \div (\text{Aggregate number of FAY enrolled students having SGPs})$$

Rule: Calculate participation adjusted adequate growth rate:

Rule: If FAY SGP Participation Rate is < 95%, then multiply Adequate Growth Rate by FAY SGP Participation Rate. A more expanded way of showing this calculation would be:

$$(\text{FAY Having SGPs}/\text{FAY enrolled expecting SGPs}) \times (\text{FAY Meeting Adequate Growth}/\text{FAY Having SGPs})$$

Rule: If FAY SGP Participation Rate is >= 95% then Adequate Growth Rate.

Rule: In a target setting year, set the growth targets for each content area. In a non-target setting year, skip this rule and proceed to the next rule:

Rule: Use the dataset of all schools having growth results.

Rule: Filter to only include All Students group.

Rule: Use the Participation Adjusted Adequate Growth Rate for each content area.

Rule: Determine the value at the 75th percentile of the distribution of Participation Adjusted Adequate Growth Rates, separately for each content area and set that to the content area growth target.

Rule: Calculate [Percent Target Met]:

$$(\text{Participation Adjusted Adequate Growth Rate}) \div (\text{Growth Target})$$

Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100%.

**Example- Growth Details - Math**

Combined	ELA			Mathematics			
Student Group	#FAY Enrolled	#FAY Tested	%FAY Tested	#Met Growth	%Met Growth	Participation Adjusted Growth	Growth % Target Met
Building Overall	379	-	-	-	38.30		70.23
All Students	379	379	100.00	196	51.72	51.72	100.00
American Indian or Alaska Native ***	*	*	*	*	*	*	*
Asian ***	24	24	100.00	22	91.67	91.67	100.00
Black or African American	127	127	100.00	39	30.71	30.71	60.57
Bottom 30%**	111	111	100.00	1	0.90	0.90	1.78
Economically Disadvantaged	127	127	100.00	39	30.71	30.71	60.57
English Learners ***	16	16	100.00	2	12.50	12.50	24.65
Hispanic of Any Race ***	12	12	100.00	3	25.00	25.00	49.31
Native Hawaiian or Other Pacific Islander ***	*	*	*	*	*	*	*
Students With Disabilities	46	46	100.00	7	15.22	15.22	30.02
Two or More Races ***	15	15	100.00	6	40.00	40.00	78.90
White	198	198	100.00	125	63.13	63.13	100.00

**Aggregation for Student Groups (Across Content Areas)**

3.3.6 Aggregate growth indices for each student group. Calculate student group weighted average growth indices (i.e., weighted percent of target met), for each student group (each subgroup and All Students group), using each content area within that student group meeting the minimum n-size.

Rule: Complete this aggregation for the Bottom 30% subgroup, which will be displayed but **NOT** included in the aggregation of student groups to a building aggregation.

Rule: Only use data from content areas meeting the minimum n-size (30 for subgroups, 1 for "All Students" group).

Rule: Weight content area growth indices (percent of target met) by the percent of accountable student records in that content area. That is the number of accountable student records in that content area divided by the sum of all accountable student records for the student group for content areas meeting the minimum n-size.

Rule: Sum the products of content area indices and content area weight within each student group.

**Example- Student Growth Summary**

Combined	ELA		Mathematics	
Student Group	ELA Growth % Target Met	Math Growth % Target Met	All Subjects Growth % Target Met	
All Students	100.00	100.00	100.00	100.00
American Indian or Alaska Native ***	*	*	*	-
Asian ***	100.00	100.00	100.00	-
Black or African American	71.25	60.57	65.89	65.89
Bottom 30%**	0.00	1.78	0.90	0.90
Economically Disadvantaged	70.68	60.57	65.63	65.63
English Learners ***	10.79	24.65	-	-
Hispanic of Any Race ***	43.16	49.31	-	-
Native Hawaiian or Other Pacific Islander ***	*	*	*	-
Students With Disabilities	26.86	30.02	28.46	28.46
Two or More Races ***	80.58	78.90	-	-
White	100.00	100.00	100.00	100.00

Refer to the Accountability Sitemap and Descriptions document for detailed information

**Aggregation to 0-100 Component Index (across student averages)**

3.3.7 Aggregate student group average growth indices for 0-100 Growth Component Index

Rule: Use only student groups which have a weighted average growth index.

Rule: Exclude Bottom 30% student group from this aggregation.

Rule: Take the unweighted average of student group average growth indices. That is take the sum of applicable student group average growth indices and divide by the number of applicable student groups with average

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growth indices.

## 3.4 Graduation Rate

### Introduction

The graduation rate component is based on a 0-100 point, percent of target met index. It is the building's average percent of graduation rate target met, averaged across cohorts and student groups.

Graduation rates are displayed for any school that has a graduation rate calculated for it by the Center for Educational Performance and Information (CEPI). CEPI calculates graduation rates and conducts a data cleanup period through the Graduation/Dropout Review and Comment Application (GAD). The graduation rate provided through this process will be used for the report cards.

Graduation rates are calculated by CEPI for the all students group and any valid subgroups within a school using at a minimum of a 4-year cohort but also using 5-year and 6-year extended cohorts where applicable and as allowed under ESSA. Michigan will use all available cohorts. Multiple cohort graduation rates will be aggregated to determine overall subgroup performance and overall component performance.

### Graduation Rate General Rules

Rule: Michigan uses up to three graduation cohorts: 4-year cohort, 5-year cohort, and 6-year cohort

Rule: Subgroups – There are 11 student subgroups for schools/buildings: All Students, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, Two or more races, Hispanic of any race, Economically Disadvantaged, English Learners, Students with Disabilities. This satisfies the ESSA requirement for data disaggregation for accountability purposes for the following subgroups: race/ethnicity, gender, socioeconomic status, disability, and English learners (ELs).

Rule: Determine student groups meeting minimum student counts:

Rule: For calculations, include only student groups meeting the minimum n-size (30 students). Schools with at least 10 students in the All Students group will have the overall building rate(s) used to calculate an index value.

Rule: For public displays, include only student groups (All Students group and/or subgroups) having at least 10 or more students. That is, student groups having 10-29 students will be displayed publicly but not be included in aggregation calculations.

Rule: For secure displays (limited to authenticated users), include any student groups (All Students group and/or subgroups) having at least 1 or more students. That is, student groups having 1-9 students will be displayed securely but not displayed publicly nor included in aggregation calculations.

### Graduation Rate Component Student Level Record Preparations

Rule: Students are placed into a cohort year when they are first identified as ninth graders. Students who transfer into the public education system after ninth grade are placed into the appropriate cohort based on the grade in which the initial Michigan district reports for them in the state's enrollment system (Michigan Student Data System; MSDS).

Rule: Students reported in MSDS as nonpublic or homeschooled students are excluded from graduation rate component calculations as well as from the rest of the accountability system

Rule: A student is included in the graduation rate of the final building that the student attended during the four-year period. Cohort totals take into account students who have transferred into the final building and students who transferred out to another public school will be included in the building to which they transferred.

### Aggregation for each combination of Cohorts and Student Groups

3.4.1 CEPI calculates aggregate values for each graduation cohort and each student group.

Rule: Aggregate the number of students included in each cohort and student group.

Rule: Aggregate the number of students counted as graduating for the cohort and student group.

Rule: Calculate graduation rates for the cohort and student group:

$$[\text{Number Counted as Graduating}] \div [\text{Cohort Total}]$$

3.4.2 MDE extracts the CEPI aggregated graduation counts and rates from the CEPI graduation cohort tables.

3.4.3 MDE calculates the remaining aggregate values for each cohort and student group

Rule: In a target setting year, set the growth targets for each graduation cohort. In a non-target setting year, skip this rule and proceed to the next rule:

Rule: Use the dataset of all schools having graduation rate results.

Rule: Filter to only include All Students group.

Rule: Use the variable Graduation Rate.

Rule: Determine the value at the 75th percentile of the distribution of Graduation Rates, separately for each graduation cohort and set that to the graduation cohort target.

Rule: Calculate [Percent Target Met]:

$$(\text{Graduation Rate}) \div (\text{Graduation Rate Target})$$

Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100%.

Note: Current proposal only uses a single year of data (i.e., no multi-year averaging).

### Example- Graduation Rate Details – Four-Year Cohort

Combined	4-Year Graduation Cohort		5-Year Graduation Cohort		6-Year Graduation Cohort	
Student Group	#Students Eligible to Graduate	#Graduates	Graduation Rate	Graduation Rate % Target Met		
Building Overall	-	-	92.97%	96.95		
All Students	389	376	96.66%	100.00		
American Indian or Alaska Native ***	*	*	*	*		
Asian	42	41	97.62%	100.00		
Black or African American	115	109	94.78%	100.00		
Economically Disadvantaged	73	68	93.15%	98.63		
English Learners ***	13	13	100.00%	100.00		
Hispanic of Any Race ***	*	*	*	*		
Native Hawaiian or Other Pacific Islander	-	-	-	-		
Students With Disabilities	51	40	78.43%	83.05		
Two or More Races ***	11	11	100.00%	100.00		
White	213	207	97.18%	100.00		

### Aggregation For Student Groups (Across Cohorts)

3.4.4 Aggregate graduation rate indices (percent of target met) for each student group. Calculate student group weighted average graduation rate indices, for each student group (each subgroup and All Students group), using the cohort weightings.

Rule: Only use data from cohorts meeting the minimum n-size.

Rule: 4-year graduation cohort weight is 50%

Rule: 5-year graduation cohort weight is 30%

Rule: 6-year graduation cohort weight is 20%

Rule: If a cohort does not meet the minimum n-size requirements its weight is redistributed among the remaining cohorts so that the remaining cohort weights retain their relative weight to one another.

Rule: Weight each graduation rate index by the cohort weight:

$$(\text{4-year cohort \% of Graduation Rate Target Met}) \times (\text{4-year cohort weight})$$

$$(\text{5-year cohort \% of Graduation Rate Target Met}) \times (\text{5-year cohort weight})$$

$$(\text{6-year cohort \% of Graduation Rate Target Met}) \times (\text{6-year cohort weight})$$

Rule: Sum the products of cohort indices and cohort weight within each student group.

**Example- Graduation Index Details – English Learners**

Graduation Index Details: English Learners			
Graduation Cohort	Percent of Target Met	Cohort Weight	Weighted Points
Student Group Graduation Index (add up all weighted points)			<b>82.84</b>

**Aggregation to 0-100 Component Index (Across Student Group Averages)**

3.4.5 Aggregate student group average graduation indices for 0-100 Graduation Component Index.

Rule: Use only student groups which have a weighted average graduation index.

Rule: Take the unweighted average of student group average graduation indices. That is, the sum of student group average graduation indices divided by the number of student group average graduation indices.

**Example- Graduation Rate Summary**

Combined	4-Year Graduation Cohort		5-Year Graduation Cohort		6-Year Graduation Cohort	
Student Group	4-Year Graduation Cohort % Target Met	5-Year Graduation Cohort % Target Met	6-Year Graduation Cohort % Target Met	Weighted Average % of Target Met Across Cohorts		
All Students	100.00	100.00	100.00	100.00		
American Indian or Alaska Native ***	-	-	*	-		
Asian	100.00	100.00	100.00	100.00		
Black or African American	94.44	100.00	100.00	97.22		
Economically Disadvantaged	90.76	100.00	97.36	98.94		
English Learners ***	74.75	97.54	100.00	-		
Hispanic of Any Race ***	88.24	100.00	100.00	-		
Native Hawaiian or Other Pacific Islander	-	-	-	-		
Students With Disabilities ***	96.68	100.00	99.66	99.66		
Two or More Races ***	*	*	*	-		
White	100.00	100.00	100.00	100.00		

**3.5 English Language Proficiency (ELP) Assessments Participation**

**Introduction**

The English Language Proficiency (ELP) assessment participation component uses a 0-100 point, percent of target met, index. It is the building’s average percent of ELP assessment participation target met, using the ELP assessments (WIDA Access and WIDA Alt. Access).

The validity of the accountability system results is dependent on the percentage of students that participated in the assessment and received a valid test score. This component evaluates whether the EL student group met the ELP assessment participation target (95% tested) on the ELP assessments (WIDA Access or WIDA Alt Access). EL student groups are evaluated for ELP assessment participation only if the number of enrolled EL students reaches a minimum count (30 students).

**ELP Assessments Participation General Rules**

Rule: The ELP assessment participation component is based on a 0-100 point, percent of target met, index.

Rule: EL enrollment is the number of EL students to be EL tested (EL accountable students).

Rule: ELP Assessment Participation Rate is the percentage of EL accountable students that are counted as participating in state ELP assessments.

Rule: There are two English Language Proficiency (ELP) Assessments – WIDA Access and WIDA Alternate Access



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- Rule: For ELP assessments, the target participation rate is 95%, mirroring the 95% requirement in federal law applied to the general assessments.
- Rule: ELP assessments have four domains: Reading, Writing, Speaking, and Listening which are combined for an overall composite determination of English Proficiency.
- Rule: ELP assessments are expected, scored, and included in accountability only for students flagged as English Learners (ELs) in the state's enrollment system (MSDS; Michigan Student Data System).
- Rule: For the ELP assessments, students are tested in the grades K-12.
- Rule: Subgroups – The ELP assessments apply only to English Learners (ELs). ELP assessment participation is disaggregated only for ELs. ELP assessment participation is not disaggregated for All Students, racial/ethnic, economically disadvantaged, nor students with disabilities subgroups.
- Rule: Determine the groups of EL students meeting minimum student counts:
- Rule: For calculations and for public displays, include only groups of EL students meeting the minimum n-size (**30** EL students).
  - Rule: For secure displays (limited to authenticated users), include any group of EL students having at least 1 or more EL students.
- Refer to **the Accountability Participation Component Business Rules** for detailed information.*

### ELP Assessments Participation Student Level Record Preparations

- Rule: Only students flagged as English Learners (ELs) in MSDS using the student snapshot grouping associated with the current administration of WIDA are included in a school/building EL participation rate.
- Rule: Only students flagged as enrolled in MSDS are included in a school/building EL participation rate.
- Rule: Primary Education Providing Entity (PEPE) will be held accountable for testing the student.
- Rule: Exclude Non-public school, homeschooled, and Accepted Test Exceptions.
- Rule: Exclude early childhood (grade 30), adult education (grade 20), and special education transition (grade 14) students.
- Rule: Exclude student records from content areas where they have an accepted Not Tested Reason for that content area.
- Rule: Students only count as participating by having a valid score **OR** having an accepted test exception for at least one of the four WIDA ACCESS Assessment Content Domains: Reading, Writing, Speaking, and Listening.
- Dependency: The current academic year enrollment data is available for extraction from CEPI.*
- Dependency: The current academic year valid test scores have been received from the vendor.*

- 3.5.1 MDE extracts current year EL enrollment student data available from CEPI/MSDS using the student snapshot grouping associated with those assessments.
- 3.5.2 MDE extracts current year entity data available from CEPI/EEM using the entity snapshot grouping associated with those assessments.
- 3.5.3 MDE receives current year ELP Assessment test scores data from the vendors.
- 3.5.4 MDE merges CEPI/MSDS enrollment and demographic data, CEPI/EEM entity data, and vendor test score data and adds various data flags needed for accountability calculations.

### ELP Assessments Participation by Student Group

- 3.5.5 Calculate aggregate values for English Learner (EL) participation.
  - Note: EL participation does not have content areas and applies only to the English Learner student group.*
  - Rule: English Learner Valid Subgroup – N-Size = 30 or more enrolled ELs.
  - Rule: Aggregate only for the English Learner (EL) student group.
  - Rule: Aggregate the number of accountable students.
  - Rule: Aggregate the number of student records counting as participating.
  - Rule: Calculate Participation rate:  
$$[\text{Aggregate Number Counting as Participated}] \div [\text{Aggregate Number of Accountable Students}]$$
  - Rule: [Target] = 95%.

Rule: Calculate [Percent of Target Met]:

$$[\text{Participation Rate}] \div [\text{Target}]$$

Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100%.

Note: Current proposal only uses a single year of data (i.e., no multi-year averaging) but if that changes we would want a click through to the data to multi-year calculations.

**Example- Participation Details – English Learner (EL) Assessment (WIDA)**

Combined	ELA	Mathematics	Science	Social Studies	English Learners
Student Group	# Enrolled	# Tested	% Tested	Participation % Target Met	
English Learners	155	155	100.00	100.00	100.00
					English Learner Participation Index Value: 100.00

**ELP Assessments Participation Aggregation for Student Groups**

3.5.6 Aggregate ELP assessment participation index for the EL student group

Rule: Set the EL student group ELP assessment participation Index (percent of target met) equal to the EL student group ELP assessment participation index

Note: ELP assessment participation data is not partitioned by any variable (e.g., content area proficiency is partitioned by content areas) and so there is no aggregation to be completed within a student group.

**Example- ELP Assessment Participation – English Learners**

ELP Assessment Participation: English Learners			
	Percent of Target Met	Weight	Weighted Points
ELP Assessment Participation	81.82%	100.0%	81.82
ELP Assessment Participation Index			<b>81.82</b>

**ELP Assessments aggregate to 0-100 Component Index (Across Student Group Averages)**

3.5.7 Set the 0-100 ELP Assessment Participation Component index equal to the EL student group ELP Assessment Participation percent of target met.

Note: EL participation applies only to the English Learner student group and so the EL subgroup is the only student group with data. Building overall indices are the average of student group indices but in this case, there is only one student group index. Therefore, the building overall index is set equal to the EL subgroup index.

## 3.6 English Learner (EL) Progress

### Introduction

The English Learner Progress component is based on a 0-100 point, percent of target met, index. Since the measure of the component only applies to the English Learner (EL) student group and there is only one measure, there is no further aggregation needed after the initial calculation. The EL student group value is also applied to the building overall but is not included in the calculations of any other student group.

The English Learner (EL) progress component considers students showing progress if one of the following is demonstrated using the EL assessment (WIDA ACCESS):

- Not currently English proficient but showing adequate growth
- English proficient

### Student Growth Percentiles

MDE uses Student Growth Percentiles (SGPs) to measure student growth on state assessments, including on the English Learner (EL) assessment (WIDA Access). SGPs describe a student's learning over time compared to other students with similar prior test scores (i.e., their academic peers). In order to calculate SGPs, students are grouped with academic peers throughout the state who had comparable score patterns on past tests. Students in each academic peer group are then ordered based on their score on the current year test. Each student then receives a percentile rank, compared to their academic peers.

Like other percentile scores, SGPs range from 1-99, where a SGP of 50 indicates the student demonstrated growth greater than half of students with comparable score histories in that subject. Higher SGPs represent greater learning relative to academic peers and lower SGPs represent lesser learning relative to academic peers.

### Adequate Growth Percentiles

Adequate growth is the growth necessary for a student to reach proficiency in a set timeframe. Michigan's measure of adequate growth is an adequate growth percentile (AGP) which is the student growth percentile (SGP) growth curve necessary for a student to consistently reach or exceed in order to attain proficiency in a set timeframe. The timeframe to attain English proficiency varies based on a combination of a student's prior performance and prior number of years identified as an English Learner. Timeframes need to be adjusted each year based on changing values in a student's performance and time identified as an English Learner. The timeframe has a research-based maximum length of seven years

Students that are currently not proficient will count toward EL progress if they are demonstrating adequate growth (i.e., their SGP is equal to or greater than their calculated AGP).

### EL Progress General Rules

Rule: The EL Progress component is based on a 0-100 point, percent of target met, index.

Rule: Subgroups – EL progress only applies to the English Learner (EL) subgroup. The EL Progress data is not disaggregated for the other student groups.

Rule: EL progress is publicly displayed for any English Learner student group that has at least 10 FAY students. The EL progress component is used in the overall 0-100 index calculation if there are at least 30 FAY students.

Rule: EL progress is displayed down to one student for authenticated users.

### EL Progress Component Student Level Record Preparations

Rule: Only students reported in the state's enrollment system (Michigan Student Data System; MSDS) as English Learner (EL) students are included.

Rule: Only students flagged as enrolled in MSDS are included.

Rule: Only Full Academic Year (FAY) students are included in the EL progress component.

Rule: Exclude Non-public school and homeschooled students.

Rule: Exclude early childhood (grade 30), adult education (grade 20), and special education transition (grade 14) students.

Rule: Exclude students where they are flagged as having a Non-Standard Accommodation or a Prohibited Behavior for one or more domain.

Rule: Exclude student records where they have an accepted Not Tested Reason for one or more domain.

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Rule: Only the overall WIDA score is used in calculating WIDA SGPs (domain scores are not included).

Rule: To receive an WIDA SGP students must have valid results in all four WIDA domains assessed (listening, speaking, reading, and writing).

Rule: For WIDA SGPs (and like content area SGPs) only data from standard grade progressions will be used to calculate SGPs. That is students who repeat or skip grades will not have WIDA SGPs that year.

### Aggregation for EL Progress Metric

#### 3.6.1 Calculate aggregate values for the EL student group

Rule: EL progress is only calculated and aggregated for the EL student group

Rule: Aggregate the number of accountable EL FAY enrolled students for the WIDA test period.

Rule: Aggregate the number of accountable EL FAY students counted as participating in WIDA testing.

Rule: Calculate EL FAY enrolled participation rate:

$$(\text{Number EL FAY Tested}) \div (\text{Number EL FAY enrolled})$$

Rule: Aggregate the number of accountable EL FAY students meeting EL Progress. Where students count as meeting EL progress if they meet either of the following conditions:

Rule: Meet EL proficiency (currently defined as a WIDA Access PL of 4.5 or higher)

Rule: OR have a WIDA SGP equal to or greater than their WIDA AGP

Rule: Calculate the percent meeting EL progress:

$$(\text{Number FAY Meeting EL Progress}) \div (\text{Number EL FAY Tested})$$

Rule: Calculate the participation adjusted percent meeting EL progress:

Rule: If EL FAY Enrolled Participation Rate is < 95%, then multiply the Percent FAY Meeting EL Progress by EL FAY Enrollment Participation Rate. A more expanded way of showing this calculation would be:

$$(\text{EL FAY tested/EL FAY enrolled}) \times (\text{EL FAY Meeting EL Progress/EL FAY tested})$$

Rule: if EL FAY Enrolled Participation Rate  $\geq$  95%, then EL FAY Percent Meeting EL Progress

Note: ESSA does not require 95% participation on the English Language Proficiency Assessment. It is included to align with the 95% participation requirement for content area assessments.

Rule: In a target setting year, set the EL progress target. In a non-target setting year, skip this rule and proceed to the next rule:

Rule: Use the dataset of all schools having Participation adjusted EL Progress results.

Rule: Again, this is only applicable for the EL student group.

Rule: Use the variable Participation Adjusted EL Progress Rate.

Rule: Determine the value at the 75th percentile of the distribution of Participation Adjusted EL Progress Rate.

Rule: Calculate [Percent of Target Met]:

$$(\text{Participation Adjusted EL Progress Rate}) \div (\text{Target EL Progress Rate})$$

Rule: [Percent of Target Met] is capped at 100%. If the calculated value is greater than 100%, set to 100.

**Example- English Learner (EL) Progress Details**

Student Group	#FAY Enrolled	#FAY Tested	%FAY Tested	#Met EL Progress	%Met EL Progress	Participation Adjusted EL Progress	EL Progress % Target Met
English Learners	119	119	100.00	78	65.55	65.55	100.00

**Aggregation for Student Groups**

3.6.2 Aggregate EL progress index for the EL student group

Note: EL progress data is not partitioned by any variable (e.g., content area proficiency is partitioned by content areas) and so there is no aggregation to be completed within a student group.

Rule: Only the EL student group receives an EL Progress index.

**Example- EL Progress – English Learners**

EL Progress: English Learners			
	Percent of Target Met	Weight	Weighted Points
EL Progress	81.82%	100.0%	81.82
<b>EL Progress Index</b>			<b>81.82</b>

**Aggregation to 0-100 Component Index (across student group averages)**

3.6.3 Aggregate student group EL progress index for 0-100 EL Progress Component Index.

Rule: Set the overall building EL Progress Index equal to the EL student group EL Progress Index.

Note: The English Learner (EL) progress component only applies to the EL student group. No aggregation across student groups is needed.

**Example- English Learner (EL) Progress Summary**

English Learner (EL) Progress Summary		
Student Group	English Learner (EL) Progress Index (Percent of Target Met)	Percent Making EL Progress (Target 55%)
Overall	<b>81.82</b>	--
All Students	--	--
American Indian or Alaska Native	--	--
Asian	--	--
Black or African American	--	--
Hispanic or Latino	--	--
Native Hawaiian or Pacific Islander	--	--
Two or More Races	--	--
White	--	--
Economically Disadvantaged	--	--
English Learners	81.82	45.00%
Students With Disabilities	--	--

### 3.7 School Quality/Student Success

#### Introduction

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

The School Quality sub-measures will be weighted within the School Quality Component and the overall system using the weights given in the table below:

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

#### School Quality/Student Success Subcomponents

##### On-Track Attendance (K-12 Students Not Chronically Absent)

Knowing when students are struggling academically as a result of not being present in the classroom or not regularly attending school to be able to benefit from instruction is critical to improving academic outcomes and increasing student achievement. The K-12 Students Not Chronically Chronic Absenteeism measure is intended to illuminate student groups and schools that have a high prevalence of chronically absent students. Indication of high K-12 chronic absence rate can help drive improvement discussions and encourage schools to Schools and communities to work together to address the factors that lead to poor student attendance.

##### K-12 Chronic Absenteeism Overview

The K-12 Chronic Absenteeism subcomponent is based on a 0-100, percent of target met index. It is the building’s average percent of chronic absenteeism target met, averaged across student groups.

Rule: K-12 chronic absenteeism subcomponent uses the measure percent NOT chronically absent (i.e., 100% - [Percent Chronically Absent]).

Rule: Chronic absenteeism is defined as a student missing at least ten percent of all available days within a school year.

Rule: The attendance rate is calculated by comparing days attended against total days of possible attendance. Days attended are days that the student was actually present at school. Total possible attendance is the number of days students could have attended from the first day of school, the date of new enrollment, or the beginning of a program.

##### K-12 Chronic Absenteeism Inclusion Requirements

Only student records meeting the following inclusion requirements will be included in the K-12 chronic absenteeism subcomponent:

Rule: Students reported in the state’s enrollment system (Michigan Student Data System; MSDS) as having a cumulative enrollment at the school of 10 or more days for the current school year.

Rule: Students reported in the state's enrollment system (Michigan Student Data System; MSDS) as enrolled in grades Kindergarten (K) through 12.

Rule: Students reported in the state's enrollment system (Michigan Student Data System; MSDS) as nonpublic or homeschooled students are excluded from the K-12 chronic absenteeism subcomponent calculations as well as from the rest of the accountability system.

Rule: Chronic absenteeism is displayed for any school or student group that has at least 10 students. The chronic absenteeism component is used in the overall index calculation if there are at least 10 students.

Rule: Chronic absenteeism is displayed down to one student for authenticated users.

3.7.1 Calculating K-12 Chronic Absenteeism: First, the chronic absenteeism rate is calculated for each student group as:  
 $(\text{Number of students chronically absent}) \div (\text{Number of students attending for 10 or more days})$

3.7.2 Then, the percent NOT chronically absent is calculated for each student group as:

$100\% - \text{Percent Chronically Absent}$

Rule: In a target setting year, set the percent NOT chronically absent target. In a non-target setting year, skip this rule and proceed to the next rule:

Rule: Use the dataset of all schools having not chronic absence rates.

Rule: Determine the value at the 75th percentile of the distribution of not chronic absence rates.

Rule: Calculate [Percent of Target Met]:

$(\text{Not Chronic Absent Rate}) \div (\text{Target Not Chronic Absent Rate})$

3.7.3 Next the percent of target met is calculated for each student group by taking the percent NOT chronically absent and dividing it by the target percent NOT chronically absent:

$(\text{Percent NOT chronically absent}) \div (\text{Target Percent NOT Chronically Absent})$

### **K-8 Access to Arts/ Physical Education**

This measure gauges the exposure students have to the arts and physical education courses. A 100-point percent of target met index is used for this measure. 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 included in the overall index value. Calculations are done for all K-8 schools.

### **K-8 ACCESS TO ARTS/PHYSICAL EDUCATION OVERVIEW**

The K-8 Access to Arts/Physical Education subcomponent is based on a 0-100 percent of target met index. It is the building's percent of access to arts/physical education target met.

Rule: Access to arts/physical education is defined as the ratio of students to arts/physical education educator FTEs.

### **K-8 ACCESS TO ARTS/PHYSICAL EDUCATION INCLUSION RULES**

Only records meeting the following inclusion requirements will be included in the K-8 Access to Arts/Physical Education subcomponent:

Rule: Any student count record (aggregated by CEPI) in grades K-8

Rule: Any Registry of Educational Personnel (REP) record with an assignment code of:

000MH (Dance), 000LT (Theatre/Performance), 000LX (Visual Art), 000JX (Music Education), 000NZ (Sex Education), 000MD (Recreation), 000MA (Health), 000MX (Health, Phys Ed and Recreation), 000MB (Physical Education)

Rule: Any REP record with an assignment code listed above and with any grade level setting of K-8.

Calculating K-8 Access to Arts/Physical Education

The access rate is calculated as:  $\text{Enrolled Students} / \text{Educator FTE}$

Rule: use the dataset of all schools having a K-8 Access to Arts/Physical Education rate

Rule: In a target-setting year: determine the value at the 75<sup>th</sup> percentile of the distribution of K-8 Access to Arts/Physical Education access rates.

Rule: Calculate [Percent of Target Met]:

$$\text{K-8 Access to Arts/Physical Education rate} / \text{target K-8 Access to Arts/Physical Education rate}$$

Rule: K-8 Access to Arts/Physical Education is displayed for any school or student group that has at least 10 students. The K-8 Access to Arts/Physical Education component is used in the overall letter grade calculation if there are at least 10 students.

### 11-12 Advanced Coursework

The advanced coursework subcomponent is a measure of the successful completion of select course types at the school and student subgroup levels. Advanced coursework refers to classes that provide students the opportunity to earn college or career opportunity or credit while still enrolled in high school. This subcomponent is intended to highlight student access and success in advanced coursework and incentivize schools to offer their students more of these advanced opportunities.

#### Advanced Coursework Overview

The advanced coursework subcomponent is based on a 0-100 index based on a percent of target met. It is the building's average percent of advance coursework target met, averaged across student groups.

The advanced coursework subcomponent is designed to assess how well schools are providing rich academic opportunities and will be defined as the percentage of students in grades 11-12 successfully completing advanced coursework geared toward career and/or college preparation (i.e., Dual Enrollment, Early Middle College, Career and Technical Education [CTE] Program Completer, Advanced Placement, and International Baccalaureate courses). At least 10 students need to be enrolled for this measure to be calculated.

#### Advanced Coursework Inclusion Requirements

3.7.4 Only student records meeting the following inclusion requirements will be included in the advanced coursework subcomponent:

Rule: Students reported in the state's enrollment system (Michigan Student Data System; MSDS) as enrolled in grades 11 or 12.

Rule: Students reported in the state's enrollment system (Michigan Student Data System; MSDS) as nonpublic or homeschooled students are excluded from advanced coursework subcomponent calculations as well as from the rest of the accountability system.

Rule: The completed coursework must be reported in the state's enrollment system (Michigan Student Data System; MSDS) in the Teacher-Student Data Link (TSDL) collection, Student Transcript and Academic Record Repository (STARR) collection, or the Career and Technical Education Information System (CTEIS).

Rule: Successful completion of advanced course from the Student Transcript and Academic Record Repository (STARR) collection is defined as having a "GradeStatusCode" of "HonorsGrade", "OtherPass", or "PassFailPass".

Rule: Successful completion of advanced course from the Teacher-Student Data Link (TSDL) collection is defined as having a CompletionStatus of CP Completed/Passed and CourseType of Advanced Placement, International Baccalaureate, Dual Enrollment/Early Middle College, or 64b Dual/Concurrent Enrollment Course. These are CourseTypeCodes of 04, 05, 07, and 10 respectively.

Rule: Successful completion of advanced course from the Career and Technical Education Information System (CTEIS) collection is defined as having a CompletionStatus of "completer – a student who has completed a program in another PSN in the same CIP code", or "completer– a student who has met the criteria to complete a CTE Program."

Rule: Advanced coursework subcomponent is displayed for any school or student group that has at least 10 students. The advanced coursework subcomponent is used in the overall index calculation if there are at least 10 students.

#### Calculating Advanced Coursework

3.7.5 First, calculate the percent of grade 11 and 12 students who completed advanced coursework for each student



group:

$$\frac{\text{Grade 11 – 12 students successfully completing advanced coursework}}{\text{Grade 11 – 12 students enrolled}}$$

Rule: In a target setting year, set the percent completed advanced coursework rates. In a non-target setting year, skip this rule and proceed to the next rule:

Rule: Use the dataset of all schools having completed advanced coursework rates.

Rule: Determine the value at the 75th percentile of the distribution of completed advanced coursework rates.

Rule: Calculate [Percent of Target Met]:

$$(\text{Completed Advanced Coursework Rate}) \div (\text{Target Completed Advanced Coursework Rate})$$

- 3.7.6 Then, calculate the percent of advanced coursework target met by dividing the percent of students completing advanced coursework by the advanced coursework target for each student group:

$$\frac{\text{Percent Completing Advanced Coursework Actual}}{\text{Target Percent Completing Advanced Coursework}}$$

### Postsecondary Enrollment

Postsecondary enrollment within 12 months after graduation for all 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 (NCS).

High school graduates identified in the Michigan Student Data System (MSDS) are matched against Michigan’s Student Transcript and Academic Record Repository (STARR) Collection, a collection agency within the MSDS, and national college enrollment data from the National Student Clearinghouse (NSC) StudentTracker to create these data. Michigan acquires NSC StudentTracker student-level records by a matching process which includes the first name, middle name, last name, suffix, and date of birth. If a student’s name or date of birth in the NSC StudentTracker database doesn’t exactly match the state’s graduation record, a match may not be made. Another limitation is that most, but not all, colleges and universities provide data to NSC. Both situations can result in lower enrollment totals.

The data are collected from high schools after the high school year closes and are matched against college enrollments after at least 6 months have elapsed and a maximum of 12 months. For example, college enrollment data for the high school class of 2009-10 were first captured in the 2011-12 college school year and were included beginning in CEPI’s 2012 report updates.

Students may have enrolled in more than one college in the four years after graduating high school, but they are counted only once, for either a community college or a university, as of the time they enroll. Students are counted for their first college enrollment, favoring the university if a student happened to enroll at a university and community college at the same time. Only once a student earns their high school diploma does the report follow these high school graduates into postsecondary enrollment. Demographic categories (gender, race and ethnicity, economically disadvantaged, English language learners, homeless, migrant students, and student with disabilities) are based on the student’s high school record.

Calculation: students enrolled in a postsecondary option within 12 months / # of graduated students from the previous school year.

Rule: High school only.

Rule: Reflected by HS graduates enrolled in a postsecondary option (4-year, 2-year college university) within 12 months.

### K-8 Access to a Librarian/Media Specialist

This indicator uses a 100-point percent of target met index to indicate student access to librarians and media specialists. Full-time equivalency (FTE) values 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. Calculations are done for all K-8 schools.

#### K-8 ACCESS TO A LIBRARIAN/MEDIA SPECIALIST OVERVIEW

The K-8 Access to a Librarian/Media Specialist subcomponent is based on a 0-100 percent of target met index. It is the building’s percent of access to a librarian/media specialist target met.

Rule: Access to a librarian/media specialist is defined as the ratio of students to librarian/media specialist FTEs.

#### K-8 ACCESS TO A LIBRARIAN/MEDIA SPECIALIST INCLUSION RULES

Only records meeting the following inclusion requirements will be included in the K-8 Access to a Librarian/Media Specialist subcomponent:

Rule: Any student count record (aggregated by CEPI) in grades K-8

Rule: Any REP record with an assignment code of:

000ND (Librarian),

Rule: Any REP record with the above assignment code and with any grade level setting of K-8.

Calculating K-8 Access to a Librarian/Media Specialist

The access rate is calculated as: Enrolled Students/(Librarian/Media Specialist FTE)

Rule: use the dataset of all schools having a K-8 Access to a Librarian/Media Specialist rate

Rule: determine the value at the 75<sup>th</sup> percentile of the distribution of K-8 Access to a Librarian/Media Specialist access rates.

Rule: Calculate [Percent of Target Met]:

$$\text{K-8 Access to a Librarian/Media Specialist rate} / \text{target K-8 Access to a Librarian/Media Specialist rate}$$

### Aggregation For Student Groups (Across Subcomponents)

The average percent of school quality/student success met is calculated for each student group. This is done by taking the weighted average subcomponent percent of targets met within the student group, using the weightings described below. If a subcomponent does not have enough data to be included, then its weighting is redistributed proportionally amongst the remaining school quality subcomponents such that the remaining subcomponents retain their relative proportion to one another.

Therefore, the student group aggregation calculation will be:

$$\begin{aligned} & ( \text{(Not Chronic Absenteeism \% of Target Met)} \times \text{(Not Chronic Absenteeism Weight)} \\ & + \text{(Arts/Music/PE \% of Target Met)} \times \text{(Library/Arts/Music/PE Weight)} \\ & + \text{(Advance Coursework \% of Target Met)} \times \text{(Advanced Coursework Weight)} \\ & + \text{(Postsecondary Enrollment \% of Target Met)} \times \text{(Teacher Longevity Weight)} \\ & + \text{(Library/Media Specialist \% of Target Met)} \times \text{(Administrator Longevity Weight)} ) \\ & \div \text{(Number of Subcomponents Having Data)} \times \text{(Sum of Weights)} \end{aligned}$$

### Aggregation to 0-100 Component Index (Across Student Groups)

After a weighted average percent of target met has been calculated for each valid student group, a building-level average percent of target met is created by calculating a simple unweighted average of the student group-level aggregates.

$$\text{(Sum Student Group Average Percent of Targets Met)} / \text{(Number of Student Groups with Data)}$$

### Example- School Quality and Student Success Index

Combined	On-Track Attendance	Access to Arts/Physical Education	Access to Librarian/Media Specialist	Advanced Coursework	Postsecondary Enrollment
Subcomponent		Weight	Subcomponent % Target Met		Weighted Points
11-12 Advanced Coursework		32.81	92.32		30.29
Postsecondary Enrollment		21.88	93.48		20.45
K-12 Students Not Chronically Absent		45.31	95.69		43.36

## 4 Accountability System Summative Designations

### Introduction

To increase the accessibility of the accountability system to parents, communities, and schools, the individual component and student group indices are combined to produce the following types of overall building summative designations:

- Overall 0-100 Index (Percent of Target Met)
- ESSA-required identification categories

### 4.1 Overall 0-100 Index (Percent of Target Met)

#### Overview

The overall 0-100 index combines each of the available components of the accountability system using its respective component weight into a single numerical value for every public school. Schools having higher index values generally have met greater degrees of their targets than those schools with lower index values. This numerical value can be thought of as similar to summative indicators used in other states' accountability systems such as letter grading scales, color coding, or ranking, etc. that equates to an overall, final school performance indicator.

#### Overall 0-100 Index Inclusion Rules

Rule: Calculate an Overall 0-100 Index for each school and student group having data for one or more component.

Rule: Do **NOT** exclude special education centers, adjudicated youth, SEEs, or S2E2s based solely on their entity type. (If they do not have data for any of the components they will not be included.)

Rule: Exclude non-public schools.

#### Overall 0-100 Index Component Weightings

ESSA requires the components of Proficiency, Growth, English Learner (EL) Progress, and Graduation Rate as a group to be given "much more weight" than the School Quality component. To fulfil this requirement Michigan uses the component weightings given in the table below. Many schools and student groups will not have all seven components. When a component is missing (i.e., does not have enough data to be included) its weight is redistributed proportionally to the remaining components. This allows the remaining components to retain their relative weight to one another and therefore preserves the value placed on that component by policy makers.

Component	Initial Weight
Growth	34%
Proficiency	29%
School Quality/Student Success	14%
Graduation Rate	10%
English Learner Progress	10%
Summative Content Area Assessment Participation	2%
English Language Proficiency (ELP) Assessment Participation	1%

## Overall 0-100 Index Calculations

Calculate an overall 0-100 index for each school and student group by taking the weighted average of each available component for that school or student group using the weightings given above.

Rule: If a component does not have enough data to be included, then its weighting is redistributed proportionally to the remaining components such that the remaining components retain their relative proportion to one another.

Rule: Calculate the Overall 0-100 Index using the following formula:

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

## 4.2 ESSA-Required School Identification Categories

### Overview

ESSA establishes three categories of schools which states must identify and support in improving their outcomes. These categories are Comprehensive Support and Improvement (CSI), Targeted Support and Improvement (TSI), and Additional Targeted Support (ATS)

CSI schools are those with the broadest and deepest challenges. This category is identified once every three years, beginning in 2016-17. Of the three categories, these schools will receive the greatest degree of support and interaction from the state. The school's district will need to work with the school, and possibly the state, to determine the unmet needs within the school and develop a plan to meet those needs. This plan must be approved and monitored by the Michigan Department of Education (MDE). The district is given a MDE-determined amount of time to show improvement with the school and if sufficient progress has not been made then more rigorous actions determined by MDE must be taken.



TSI schools have a broad challenge with one or more student groups. This category is identified annually, beginning in 2016-17. Of the three categories, these schools will receive the least support and interaction from the state. The school must identify the need of the identified student group(s) and work with their district to develop a plan to meet those needs. The plan must be approved and monitored by the district. The school is given a district-determined amount of time to show improvement with the student group and if sufficient progress has not been made then the district must determine what, if any, additional actions are appropriate.

ATS schools have a deep challenge with one or more student groups. This category is identified once every six years, though due to federal redefinitions, the current ATS cycle will run for five years, with current naming in 2017-18 and six-year cycle beginning with naming in 2022-23. These schools will receive moderate support and interaction from the state. The school must identify the need of the identified student group(s) and work with their district to develop a plan to meet those needs. The plan must be approved and monitored by the district. The school is given an MDE-determined amount of time to show improvement with the student group and if sufficient progress has not been made then the school will become a CSI school.

### 4.2.1 Comprehensive Support and Improvement (CSI)

#### Overview

These are the schools meeting at least one of the following criteria:

- Bottom 5% of schools
- "All Students" Four-year Graduation Rate below 67%
- Were an ATS school that did not exit that status in the state-determined timeline

CSI schools must meet MDE-determined criteria to exit this status. For CSI schools not meeting MDE-determined criteria within a MDE-determined timeframe the state must provide more intensive supports.

### Inclusion Rules

Rule: Limit to schools having at least 30 FAY students in both ELA and math in the proficiency component for Bottom 5% eligibility.

Rule: Limit to schools having at least 30 students in the school's four-year graduation cohort for low graduation rate eligibility.

Rule: Exclude schools that report 100% of enrolled students as Students with Disabilities.

Rule: Exclude non-public schools.

### Calculations

#### Identify Comprehensive Support Schools

Rule: Determine if it is a Comprehensive Support naming year.

Rule: If it is a CSI naming year, proceed to the steps below else skip to the next block of rules.

Rule: Determine the total count of Title I schools that have at least 30 FAY students in both ELA and math in the proficiency component.

Rule: Multiply the total count of included schools by 5% and round up to the nearest integer and set this as the "Expected Number of Title I CSI Schools".

Rule: For purposes of setting CSI index threshold only – exclude schools with 90% or more of students reported in an alternative educational setting in most recent spring MSDS collection and having a school emphasis of "Alternative Education" and authorized educational setting of "Alt" in the EEM.

Rule: Sort the included schools from lowest to highest on their Overall 0-100 Index

Rule: Starting with the school having the lowest Overall 0-100 Index, designate the school as CSI and proceed to the Title I school with the next lowest Overall 0-100 index.

Rule: Continue designating schools as CSI until the number of schools identified is equal to "Expected Number of Title I CSI Schools".

Rule: Identify all non-Title I schools with overall index values equal to or below the highest overall index value of the Title I CSI-identified schools

Rule: Identify any alternative schools excluded from the CSI threshold setting with overall index values equal to or below the highest overall index value of the Title I CSI identified schools.

Rule: Then identify as CSI any school having a four-year graduation rate and whose four-year graduation rate value is equal to or less than 67%.

Rule: Then identify as CSI any school who was previously Additional Targeted Support but did not exit Additional Targeted Support status within the MDE-determined timeline.

Rule: If it is **NOT** a Comprehensive Support naming year, proceed to the steps below.

Rule: Determine the total count of Title I schools having at least 30 FAY students in both ELA and math in the proficiency component.

Rule: Multiply the total count of included schools by 5% and round up to the nearest integer and set this as the "Expected Number of **Likely** Title I CSI Schools".

Rule: Sort the included schools from lowest to highest on their Overall 0-100 Index

Rule: Starting with the school having the lowest Overall 0-100 Index, designate the school as **Likely** CSI and proceed to the Title I school with the next lowest Overall 0-100 index.

Rule: Continue designating schools as **Likely** CSI until the number of schools identified is equal to "Expected

Number of **Likely** Title I CSI Schools”.

Rule: Identify all non-Title I schools with overall index values equal to or below the highest overall index value of the Title I CSI-identified schools.

Rule: Then identify as **Likely** CSI any school having a four-year graduation rate and whose four-year graduation rate value is equal to or less than 67%.

#### 4.2.2 Targeted Support and Improvement (TSI)

##### Overview

These are schools having one or more student subgroups performing in the bottom 25% within each applicable component in a given year (TSI identification occurs every year).

For schools identified as TSI, the school, in cooperation with their district, is expected to develop a plan to help the school meet the district-determined exit criteria within the district-determined timeframe.

##### Inclusion Rules

Rule: Limit to schools having one or more valid student subgroups (n-size 30) in both ELA and math in the Proficiency component.

Rule: Exclude schools that report 100% of enrolled students as Students with Disabilities.

Rule: Exclude non-public schools.

##### Calculations

Identify Targeted Support and Improvement Schools

Rule: Determine the threshold for the bottom 25% within each component.

Rule: Exclude CSI schools.

Rule: Identify as “Preliminary TSI” schools having one or more student groups at or below the bottom 25% threshold in each applicable component.

Rule: Complete the identification process for ATS schools.

Rule: Exclude ATS schools.

Rule: Identify as TSI schools that are (1) identified as “Preliminary TSI” and (2) are **NOT** identified as CSI or ATS.

#### 4.2.3 Additional Targeted Support (ATS)

##### Overview

These are the preliminary TSI schools having any subgroup performing overall at or below the lowest performing 5% of schools in the state (ATS naming years initially occur once every five years, and then subsequently occur every six years). Additional Targeted Support schools are a subset of Targeted Support and Improvement schools.

For schools identified as Additional Targeted Support (ATS), the school, in cooperation with their district, is expected to develop a plan to help the school meet the MDE-determined exit criteria within the MDE-determined timeframe.

School identified as ATS schools which do not exit this status in a MDE-determined timeframe become identified as CSI schools.

##### Inclusion Rules

Rule: Limit to schools having one or more valid student subgroups (n-size 30) in ELA and math in the Proficiency component.

Rule: Exclude schools that report 100% of enrolled students as Students with Disabilities.

Rule: Exclude non-public schools.

Rule: Exclude schools identified as CSI.

Rule: Limit to schools identified as “Preliminary TSI”.

## Calculations

### Identify Additional Targeted Support Schools

Rule: If it is an ATS naming year (ATS naming years initially occur once every five years, and then subsequently occur every six years), proceed to the steps below else skip to the next block of rules.

Rule: Determine the CSI threshold (i.e., the highest Overall 0-100 Index value of that year’s designated CSI schools) and set this as the ATS Threshold.

Rule: Identify as ATS schools having one or more student groups whose overall 0-100 index is at or below the CSI/ATS threshold (i.e., have one or more student groups performing like a bottom 5% school).

Among any school with a preliminary TSI designation, determine the schools having any subgroup performing overall at or below the lowest performing 5% of schools in the state (the overall index value threshold also used for bottom 5% identification).

Rule: Remove the “Preliminary TSI” designation from any school identified as ATS.

Rule: If it is **NOT** a CSI naming year, do **NOT** identify any school as ATS.

## 5 Long Term Goals & Measures of Interim Progress

ESSA replaces the target terminology used in previous accountability systems with that of long-term goals and measures of interim progress. Michigan’s long-term goal is to have 75% of students achieving the component targets by 2024-25. The year 2024-25 was chosen to align the accountability system long-term goals to the Top 10 in 10 goals. The interim goals would be to increase the percentage of students meeting the target at a rate where 75% of students reach the target by the long-term goal deadline of 2024-25.

Each component target is set in the baseline year (2016-17) at the value equal to the 75th percentile of the statewide distribution of student performance on that component in the baseline year (2016-17). After being set, component targets would remain constant up through 2024-25.

Michigan believes this method sets challenging but achievable long-term goals. By definition only 25% of students are meeting the component targets in the baseline year (2016-17). Moving the entire statewide distribution of students upward so that an additional 50% of students meet the targets in just 8 years will be a significant challenge. However, also by definition 25% of students are already meeting targets, demonstrating these targets are achievable.

Component	Baseline Value (2016 17)	Long term Goal (2024 25)
Proficiency – ELA	49.14%	60.00%
Proficiency – Math	37.55%	47.55%
Growth – ELA	49.99%	57.92%
Growth – Math	43.49%	50.70%
Graduation – 4-year	79.79%	94.44%
Graduation – 5-year	81.99%	96.49%
Graduation – 6-year	81.25%	97.00%
EL Progress	46.41%	59.26%
K-12 On-Track Attendance	87.41%	92.37%
11-12 Advanced Coursework	27.96%	49.82%
Postsecondary Enrollment	62.50%	74.10%

K-8 Access to Arts/Physical Education	198.4:1	145:1
K-8 Access to a Librarian/Media Specialist	8312.5:1*	8312.5:1

\*K-8 Access to a Librarian/Media Specialist values do not change from the baseline to the target because no value exists below the 79<sup>th</sup> percentile



## 6 Terms/Acronyms

Topic, Term, or Acronym	Definition
Accepted Not Tested Exception/Reason	An accepted reason for why a student was not assessed and which in all cases except for test exception type “EL Exception” removes the student completely from participation calculations (both the numerator and denominator).
Accountable Students	Students expected to test. These are students enrolled in assessed grades and who do not have an accepted test exception. This is the denominator of the participation calculation.
Adequate Growth Percentile (AGP)	Adequate growth is the growth necessary for a student to reach proficiency in a set timeframe. Michigan’s measure of adequate growth is an Adequate growth percentile which is the student growth percentile (SGP) growth curve necessary for a student to consistently reach or exceed in order to attain proficiency in a set timeframe.
All Students	All students within a school/building
All Sub Groups	All Sub Groups within a school/building
Alternative Accountability Entities	Schools meeting the criteria for alternative school accountability
Alternative Education Entities (AEEs)	Alternative Education Entities—schools or programs which serve students in an alternative educational setting. AEEs have a unique building code in the Educational Entity Master (EEM).
American Indian or Alaska Native	A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
Asian	A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
Black or African American	A person having origins in any of the Black racial groups of Africa. Hispanic or Latino – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.
Business Requirements Document (BRD)	This type of document contains the objectives, rather than how to achieve them. It answers what, where, when, why?
Center for Educational Performance and Information (CEPI)	Agency responsible for collecting, securely managing, and reporting education data in Michigan as well as maintaining a repository of entity (EEM) and student data (MSDS) for all schools.
Chronic Absenteeism	Michigan defines chronic absenteeism as missing at least 10% of a school year.
College Board - SAT	This is the college entrance portion of the M-STEP assessment
Component Goal	95% for both general assessments and EL assessments.
Content Area (CA)	Math, English Language Arts (ELA), Science, Social Studies. General Participation uses all four content areas. Proficiency and Growth only use Math and ELA.

Counted as Participating	Students having either valid test scores or for ELA-only have an accepted not tested exception of “EL Exception.” This is the numerator in participation rate calculations.
Economically Disadvantaged	A student who is a member of a household that meets the income eligibility guidelines for free or reduced lunch. Students are identified as Economically Disadvantaged (ED) in three ways: Supplemental Nutrition Eligibility (SNE), Direct Certification, or categorical eligibility by either being migrant or homeless.
Educational Entity Master (EEM) – components	The EEM is used for the collection of entity data for state and federal reporting. MDE extracts available entity data used in calculating accountability system. <a href="http://www.mi.gov/eem">www.mi.gov/eem</a>
Educator Effectiveness	Educator Evaluations are based on state law that all of Michigan’s public educators will be evaluated using measures of student growth and the results of these evaluations will be reported into CEPI’s data systems.
English Learner Proficiency (ELP) Assessment	An assessment given to students whose primary language is not English to determine the proficiency level of the student to understand and communicate in English. In Michigan, this is the WIDA Access for ELLs and WIDA Alternate Access.
English Learner Progress	Demonstration of either English proficiency OR an English language acquisition growth trajectory in which English proficiency will be reached in an appropriate timeframe.
English Learners (ELs)	Title III program designed to assure speedy acquisition of English learner proficiency, assist students to achieve in the core academic subjects, and to assist students to meet State standards.
Equity strategy	High quality education through equitable provision of services.
Every Student Succeeds Act (ESSA)	US law passed in December 2015 that governs the United States K–12 public education policy. The purpose of ESSA is to provide all students a “significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps.”
Exit Ready strategy	Career/ college readiness after completion of high school
Full Academic Year (FAY)	Students present in the building/school for Fall count day, Spring count day, and the assessment window enrollment snapshot
General Assessments	M-STEP, MI-Access, and SAT
Intermediate School District (ISD)	A government agency usually organized at the county or multi-county level that assists a local school district in providing programs and services.
Michigan Department of Education (MDE)	State of Michigan agency overseeing K-12 public education.
Michigan Student Data System (MSDS)	The MSDS is the CEPI system used for the collection of student level data for state and federal reporting. MDE extracts available student enrollment and demographic data used in calculating accountability system components.
Michigan Student Test for Educational Progress (M-STEP)	One of five components of the Michigan Educational Assessment System. M-STEP is the State’s general education assessment for students in grades 3–11 and is used Statewide to assess student performance in specific content areas.

Michigan's alternate assessment system (MI Access)	Composed of three assessment programs (Functional Independence, Supported Independence, and Participation) and is based on Alternate Achievement Standards (AA-AAS). MI-Access is intended for students for whom the general assessment, either with or without assessment accommodations, is not appropriate as determined by a student's Individualized Education Program (IEP) Team.
Native Hawaiian or Pacific Islander	A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
School Quality	It is the building's average percent of school quality targets met, averaged across student groups and each of the applicable school quality subcomponents.
Scorecard	How a school or district performed related to assessment for a Current Academic Year.
Student Growth Percentiles (SGPs)	Measure student growth on state assessments, including on the English Learner (EL) assessment (WIDA Access). SGPs describe a student's learning over time compared to other students with similar prior test scores (i.e., their academic peers)
Students with Disabilities (SWD)	Students who are marked Special Education in the Michigan Student Data System (MSDS) at the time of testing
Teacher Student Data Link (TSDL)	In order to tie individual student growth on state assessments to specific educators, students must be linked to courses and teachers through the TSDL
Technical Requirements Document (TRD) –	This type of document tells how to achieve the Business Requirements and replicate data components.
Two or More Races	Americans who have mixed ancestry of "two or more races"
White	A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
WIDA	Assessment brand of the English learner proficiency assessment used by public schools in Michigan.
WIDA ACCESS for ELs	ACCESS for ELs is a secure large-scale English language proficiency assessment administered to Kindergarten through 12th grade students who have been identified as English learners (ELs).

Sources:

Subgroup definitions: <https://www.census.gov/topics/population/race/about.html>,

WIDA: <https://www.wida.us/assessment/ACCESS20.aspx>

MDE: [http://www.michigan.gov/mde/0,4615,7-140-6530\\_30334\\_40078---,00.html](http://www.michigan.gov/mde/0,4615,7-140-6530_30334_40078---,00.html)