# 2017
## MICHIGAN SCHOOL
# INDEX SYSTEM
# GUIDE



**MICHIGAN**
Department of **Education**
Office of Educational Assesment and Accountability

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# Introduction

This guide is meant to provide a detailed look at the new Michigan School Index System, which was developed to comply with the school accountability requirements set out in the federal Every Student Succeeds Act of 2015 (ESSA). ESSA replaces the federal No Child Left Behind (NCLB) Act and directs states to develop accountability systems to help provide all children with the significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps.

In the last 15 years school accountability has gone from the dichotomous and prescriptive system of Adequate Yearly Progress (AYP) under NCLB through less-prescriptive systems focused on closing achievement gaps. Today there are familiar requirements and components with much more flexibility to develop a system that provides a more state-directed approach and fit. The information provided moving forward are contained in the Parent Dashboard for School Transparency and the Michigan School Index System.

## ▌ Parent Dashboard vs. School Index System – Why Both?

The new Michigan Parent Dashboard for School Transparency, available at www.MiSchoolData. org/ParentDashboard, reports a holistic, data-driven story of what is happening in Michigan's local schools for parent and guardian audiences. The Parent Dashboard allows users to choose, see, and understand the school performance factors most important to them from a variety of factors. The Michigan Parent Dashboard for School Transparency was developed for parents, with help from parents, and includes many school factors above and beyond what is required under state and federal reporting laws. Where possible, it provides not only a chosen school's data, but also the average of similar (peer) schools and the statewide average to help place school performance data in greater context for parents.

In contrast, the new Michigan School Index System serves to fulfill the federal requirements under ESSA for a statewide system to identify schools in need of Comprehensive Support and Improvement (CSI), Targeted Support and Improvement (TSI), and Additional Targeted Support (ATS) and as such is directed toward educators and stakeholders for the purposes of school improvement and program evaluation. MDE will use the results of the Michigan School Index System and a triage model to determine the appropriate level of support given to districts and schools statewide. The Michigan School Index System strives to balance numerous state and federal legal requirements, policies, and ideals. The system also seeks to balance accuracy and simplicity while still providing valid and reliable results. The Michigan School Index System is a single, unified system meeting both state and federal requirements for the purposes of applying school supports and interventions.

## ▌ Making Michigan a Top 10 Education State in 10 Years

The Michigan School Index System is aligned to the principles, goals, and strategies of the **MDE Top 10 Education State in 10 Years** initiative. Specifically, the Index System supports the Top 10 in 10 Years 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.*

The equitable factors included in the Index System and identification support the Top 10 in 10 Years Strategic 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.*

Finally, Top 10 principles and goals are met by strategy for implementation. The Index System implements a high standard accountability system as described in the Top 10 in 10 Years 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.*

# What's New

The Index system began with conversations related to ESSA in 2015. Key stakeholders from various external groups were brought in to develop a system with student equity as the main topic. The resulting Index System contains a blend of elements from the previous accountability systems of School Rankings (Top-to-Bottom), Scorecards, and English Learner (EL) Accountability (Annual Measurable Achievement Objectives – AMAOs). The primary functions of each of these systems included: identifying schools for federal Title I supports and interventions, identifying the bottom 5% of schools to satisfy state law, the diagnostic disaggregation

of data by student groups, and the monitoring of English Learners' progress in acquiring English proficiency. The Michigan School Index System provides for a unification of tasks previously accomplished by separate accountability systems. All previous systems have been supplanted by the Michigan School Index System. The Michigan School Index system commences with the 2016-2017 school year accountability results.

The Michigan School Index System allows users to analyze a school's strengths and weaknesses in a range of areas. Schools receive credit based on the degree to which they meet system targets. Areas included in a school's index may include: student assessment data, graduation rates, attendance rates, completing advanced coursework, postsecondary enrollment, and staffing levels. Schools receive an overall index value based on the areas above for which they have data, as well as index values for each individual area and student subgroup. Index values range from 0-100. As part of the effort to ensure an equitable outcome for all students, ESSA continues the requirement that data be disaggregated for specific groups of students (ESSA 1111(c)(2)). Therefore, schools with a valid student subgroup will have an index value calculated for the subgroup as well as having the subgroup included in the component and overall index values.

To help point out some of the major differences and key policy shifts between Michigan's former school accountability/identification systems (School Scorecards and Top-to-Bottom School Rankings) and the new Index System outlined in this guide, the table below provides comparisons between these systems.

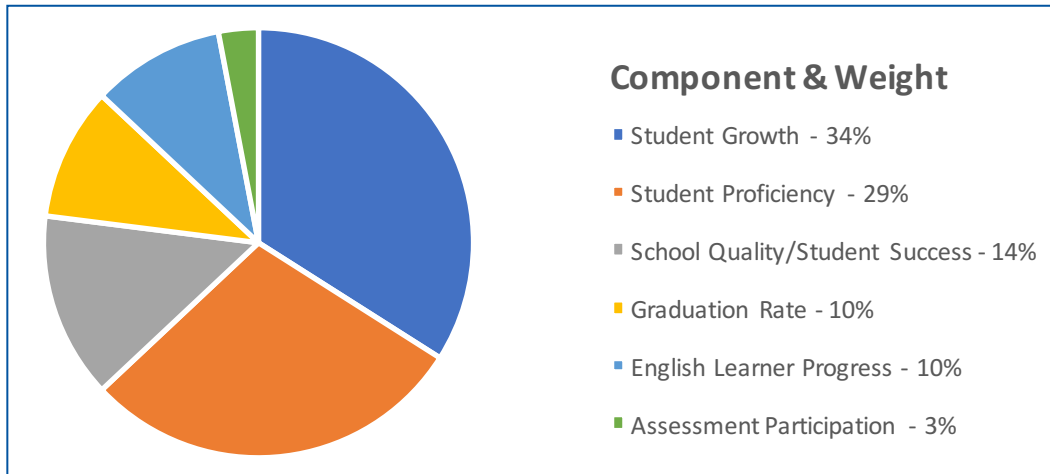| Comparison Area | School Scorecards | Top-to-Bottom School Rankings | *New School Index* |
|---|---|---|---|
| School Years Produced | 2012-13 to 2015-16 | 2012-13 to 2015-16 | 2016-17 to Unknown |
| Entity-Level Reporting | School- & district-level | School-level only | School-level only |
| Building Rating Scale | One of five colors | 0-99 overall school percentile ranking | 0-100 overall school index |
| Component Rating Scale | 0, 1, or 2 points | Z-scores: -2.00 to +2.00 | 0-100 component index |
| Performance Targets | Unique by school and increased over time | No targets; only reported performance relative to all other schools statewide | Common statewide targets that remain constant through 2024-25 |
| Impact of Less Than 95% Participation | Overall rating set to lowest possible rating | N/A | Overall rating lowered only by the degree Participation is below 95% |
| Included Subgroup Disaggregation | Yes | No | Yes |
| Student Groups Weighted Equally | Yes | N/A | Yes |
| Student Groups Receive Their Own Final Rating | No | N/A | Yes |
| How Were Achievement Gaps Addressed | Subgroup disaggregation only within components | Achievement Gap Component | Subgroup disaggregation (1) within components (2) for each component overall (3) for each subgroup Overall |
| Included a Measure of English Learners' (ELs') Acquisition of English | No; measured by a separate system under previous federal law | No; measured by a separate system under previous federal law | Yes; includes EL Progress |
| School Identification for Support & Improvement | Not used for school identification | Used for annual identification of Priority and Focus schools | Used for Identification of Comprehensive, Targeted, and Additional Targeted Support schools |
| School Quality/ Student Success | Included; based only on student attendance | N/A | Included; based on up to 5 new indicators |
| 1% MI-Access Cap | Included as a cap on proficiency component | N/A | Not included; participation monitored by ISDs |

# Michigan School Index System

## ▌ Overview of School Index

The Michigan School Index System is comprised of six components. The components were selected based on ESSA requirements, stakeholder input, public feedback, and consideration of best practices for school accountability reporting among states and education data nationwide. The components were weighted to combine results into an overall 0-100-point index for each school.

The table below lists each component, provides a basic description of that component, and gives the weight the component contributes to the overall index.

| Component | Description | Weight in Overall School Index Value |
|---|---|---|
| Student Growth | Students meeting or exceeding adequate growth expectations. | 34% |
| Student Proficiency | Students achieving at or above a level indicating they are on-track for college- and career-readiness. | 29% |
| School Quality/ Student Success | This component is a combination of up to five subcomponents, each described below:<br><br>• K-12 Percent Not Chronically Absent (students with on-track attendance)<br>• K-8 student access to arts/physical education<br>• K-8 student access to librarians/media specialists<br>• 11/12 Advanced Coursework (students completing advanced coursework through Advanced Placement, International Baccalaureate, Early/Middle College, dual enrollment pathways)<br>• Post-Secondary Enrollment (students enrolling in postsecondary institutions within 12 months of graduation) | 14% |
| Graduation Rate | Students graduating with a high school diploma within 4, 5, or 6 years | 10% |
| English Learner Progress | Students achieving at or above a level indicating they have met or exceed adequate growth expectations toward English language proficiency or are proficient in the English language. | 10% |
| Assessment Participation | Students participating in state assessments for the summative content area tests and the English language proficiency assessment. | 3% |

The graphic below shows the weight each component contributes to the overall index.



**Component & Weight**

- Student Growth - 34%
- Student Proficiency - 29%
- School Quality/Student Success - 14%
- Graduation Rate - 10%
- English Learner Progress - 10%
- Assessment Participation - 3%

Schools receive an overall index value based on the areas for which they have data, as well as index values for each individual area and student subgroup. Schools without enough students/data may have some components excluded from their overall index value. For example, an elementary school will not have a graduation rate component. Schools missing components will have weights from those missing components redistributed proportionally to the remaining components.

Individual components are covered in technical detail in separate business rules documents. Technical business rules can be found at www.mi.gov/mde-accountability.

## Fundamental Accountability Concepts

The following concepts are integral to understanding the Michigan School Index System and general school accountability results reporting practices.

### 0-100 Point Percent of Target Met

The index system moves away from a binary met/not met status when considering whether schools have met component targets. Instead, a percent of target met concept is used to determine to what degree a school has met targets. This approach allows for a more detailed view of a school's performance, relative to targets. For example, in Assessment Participation the target is 95 percent. Under the previous systems a school with 94% receive a status of "Not Met" and zero points. Under the Index System the school's actual value of 94% is divided by the target value 95% to get a participation index of 98.95 (94/95).

### Full Academic Year (FAY) Student Status

To ensure the data represent the programmatic needs of students in the building, only students enrolled for a Full Academic Year (FAY) are included in the assessment components (Proficiency, Growth, & English Learner Progress). FAY is defined as students reported as enrolled in the school at the Fall General Collection, the Spring General Collection, and at the enrollment snapshot for the given assessment. Students not present in all three snapshots are not FAY. All information for determining FAY will come from MSDS (Michigan Student Data System). For more information on FAY, please refer to the Full Academic Year Business Rules at http://www.michigan.gov/documents/mde/Full_Academic_Year_Business_Rules_516581_7.pdf.

### Grades and Assessments Included

The accountability system includes students enrolled within assessed grades for the assessment programs and content areas indicated in the table below. 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.

| Area Assessed | Grades Assessed | Assessment Program |
|---|---|---|
| English Language Arts | 3-8, 11* | M-STEP, MI-Access, SAT |
| Mathematics | 3-8, 11* | M-STEP, MI-Access, SAT |
| Science | 4, 7, 11* | M-STEP, MI-Access |
| Social Studies | 5, 8, 11* | M-STEP, MI-Access |
| English Language Proficiency | K-12 | WIDA ACCESS, WIDA Alternate ACCESS |

*12th grade students are counted in accountability calculations if they were not counted in grade 11.

Please note that PSAT 8/9, PSAT 10, and ACT WorkKeys assessment results are not included in Michigan School Index System calculations.

### Student Residency Status

Students reported in state systems as having a student residency setting of homeschooled or as private/nonpublic are excluded from the student-level data and system components used in the computation of the Michigan School Index System.

### Minimum Student Counts (N-Size)

For the index system, only subgroups with 30 or more students are included in index calculations. Subgroups with 10-29 students will have information displayed but will not be included in index calculations. Subgroups with fewer than 10 students will not have information displayed nor will they be included in index calculations. The "Bottom 30%" subgroup is displayed only for reporting purposes and is not included in index calculations.

All schools are required to be included in the accountability system, regardless of enrollment size, so a lower student count is used for the "All Students Group". The table below gives the minimum n-size required by each component to provide the student group an index calculation for that component.

| Component and Student Group | Minimum Count of Students (N-Size) to be Included in Index Calculations |
|---|---|
| **Student Growth** | |
| All Students Group | 1 |
| Demographic Subgroup | 30 |
| **Student Proficiency** | |
| All Students Group | 1 |
| Demographic Subgroup | 30 |
| **School Quality/Student Success** | |
| All Students Group | 10 |
| Demographic Subgroup | 30 |
| **Graduation Rates** | |
| All Students Group | 10 |
| Demographic Subgroup | 30 |
| **English Learner Progress** | |
| All Students Group | 30 |
| Demographic Subgroup | N/A |
| **Assessment Participation** | |
| All Students Group | 30 |
| Demographic Subgroup | 30 |

### Equal weighting of Students Groups

Subgroups are weighted equally in calculating component index values. This aligns with Michigan's Top 10 in 10 goals and is consistent with past systems (AYP and scorecards).

### Types of Averages

The accountability system uses both simple and weighted averages when aggregating the multiple content areas, graduation cohorts, student groups, subcomponents, 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 is both appropriate and fair since it ensures that a content area counts proportionally to the number of records it is made up from. The accountability system uses weighted averages to combine performance values across different content areas, multiple graduation cohort years, subcomponents (in the case of school quality/student success), and across the top level key system components as well.

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.

## ▌System Components

### Growth Component

The growth component accounts for a base 34 percent of the overall index and aggregates the percent of students meeting adequate growth across assessments, grades, and content areas. The data in this component is sourced from the 2016-17 school year.

Adequate growth is a new metric describing the percent of students on a path to becoming proficient or maintaining proficiency, within a specific timeframe. It is measured by the percent of students who either (1) have a growth score at or above their growth target OR (2) have moved from being non-proficient to being proficient.

Michigan's growth score measure is the Student Growth Percentile (SGP), which describes a student's learning over time compared to other students with similar prior achievement scores (scale scores). SGPs range from 0 to 99 and indicate what percent of similar students had lower growth than that student. The average SGP is 50.

Michigan's growth target measure is the Adequate Growth Percentile (AGP), which describes how much growth a student needs to consistently attain to be on a path to reach, or maintain, proficiency within a set timeframe. AGPs range from 0 to 99 and indicate what growth score (SGP) a student needs to reach to count as "met adequate growth."

AGPs are set based on specific timeframes that describe the amount of time the AGP model shows the student is expected to take to grow to

proficiency.. Growth timeframes vary between 1-3 years and are based on the average time students with similar previous scores took to reach proficiency. The maximum of three years is based on limitations of data and not a policy determination.

The growth component includes data from the mathematics and English language arts content areas of the SAT and the following state assessments in grades 4-8 and 11:

- M-STEP

- MI-Access Functional Independence (FI)

The assessments of MI-Access Supported Independence (SI) and Participation (P) are not included because growth scores cannot be calculated for them due to the small number of students taking those assessments. Grade 3 assessment results are not included as those students only have the current assessment score (i.e., no prior state assessment score), and so a growth score cannot be calculated for grade 3 students. The content areas of Science and Social Studies are not included as the United States Education Department (USED) has determined ESSA does not allow the inclusion of anything but mathematics and ELA in the growth component. However, Michigan is in the process of applying for a waiver from USED to include science and social studies in the growth component in the future.

To emphasize the importance of assessing at least 95 percent of students, schools with participation rates below 95 percent will have their growth rates adjusted (multiplied by participation rate). An example of this is shown in the table below. The sample group of white students is the only one showing a growth participation rate (i.e., Percent FAY Growth Expected) of 90 percent Therefore, their Percent Meeting Adequate Growth Rate is multiplied by their growth participation rate to get their Participation Adjusted Adequate Growth rate of 45 (90% x 50).

*Example Growth Component Participation Adjustment*

| Student Group | % FAY Growth Expected | % Meeting Adequate Growth | Participation Adjusted Adequate Growth | % Target Met Adequate Growth (Target 49.90) |
|---|---|---|---|---|
| All Students | 96% | 50% | 50% | 100.00% |
| American Indian or Alaska Native | - | - | - | - |
| Asian | - | - | - | - |
| Black or African American | 96% | 50% | 50% | 100.00% |
| Hispanic Or Latino | - | - | - | - |
| Native Hawaiian or Pacific Islander | - | - | - | - |
| Two or More Races | - | - | - | - |
| **White** | **90%** | **50%** | **45%** | **90.18 %** |
| Economically Disadvantaged | 95% | 50% | 50% | 100.00% |
| English Learners | - | - | - | - |
| Students with Disabilities | 96% | 50% | 50% | 100.00% |

## Proficiency Component

The proficiency component accounts for a base 29 percent of the overall index and aggregates student proficiency across assessments, grades, and content areas. The data in this component is sourced from the 2016-17 school year.

The proficiency component includes data from the mathematics and English language arts content areas of the SAT and the following state assessments in grades 3-8 and 11/12:

- M-STEP

- MI-Access Functional Independence (FI)

Grade 12 students are included if they were not previously included in grade 11 reporting. The content areas of science and social studies are not included as the USED has determined ESSA does not allow the inclusion of anything but mathematics and ELA in the proficiency component. However, Michigan is in the process of applying for a waiver from USED to include science and social studies in the proficiency component in the future.

To emphasize the importance of assessing at least 95 percent of students, schools with participation rates below 95 percent will have their proficiency rates adjusted (multiplied by the participation rate). An example of this is shown in the table below. The sample group of economically disadvantaged students is the only one showing a participation rate (i.e., Percent FAY Tested) of 90 percent. Therefore, their Percent Proficient Rate is multiplied by their participation rate to get their Participation Adjusted Proficiency rate of 45 (90% x 50).

*Example Proficiency Component Rates*

| Student Group | %FAY Tested | %Proficient | Participation Adjusted Proficiency | %Target Met Proficiency (Target 60.00) |
|---|---|---|---|---|
| All Students | 96% | 50% | 50% | 83.33% |
| American Indian or Alaska Native | - | - | - | - |
| Asian | - | - | - | - |
| Black or African American | 96% | 50% | 50% | 83.33% |
| Hispanic Or Latino | - | - | - | - |
| Native Hawaiian or Pacific Islander | - | - | - | - |
| Two or More Races | - | - | - | - |
| White | 96% | 50% | 50% | 83.33% |
| **Economically Disadvantaged** | **90%** | **50%** | **45%** | **75.00%** |
| English Learners | - | - | - | - |
| Students with Disabilities | 96% | 50% | 50% | 83.33% |

### School Quality & Student Success Component

The School Quality & Student Success component accounts for a base 14 percent of the overall index and aggregates data from five subcomponents.

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 11th and/or 12th Grades:

- Not Chronically Absent Students
- 11-12 Advanced Coursework: AP/IB/Dual Enrollment/CTE Program Completer
- Postsecondary Enrollment

Schools without 11th and/or 12th Grades:

- Not Chronically Absent Students
- Access to Arts/Physical Education
- Access to a Librarian/Media Specialist

*The individual subcomponent weightings and targets are in the table below*

| School Quality. Student Success Subcomponent | Weight in Overall System | Subcomponent Target |
|---|---|---|
| K-12 On-Track Attendance (Not Chronically Absent) | 4% | 92.37% Not Chronically Absent |
| K-8 Access to Arts/Physical Education | 4% | 145 Students : FTE |
| K-8 Access to Librarians/Media Specialists | 1% | 3212.5 Students : FTE |
| 11-12 Advanced Coursework | 3% | 49.85% Successfully Completing |
| Postsecondary Enrollment | 2% | 74.10% Enrolled within 12 Months |

## ▌School Quality/Student Success Subcomponents

### K-12 Not Chronically Absent

The K-12 Not Chronically Absent subcomponent accounts for a base 4 percent of the overall index and is intended to illuminate student groups and schools that have a high prevalence of chronically absent students. An ndication of high K-12 chronic absence rate can help drive improvement discussions and encourage schools and communities to work together to address the factors that lead to poor student attendance. The data in this component is sourced from the 2016-17 school year.

Students are defined as chronically absent if they have a cumulative enrollment of at least 10 days and have missed more than 10 percent of their scheduled days. This definition is used to calculate the percent of students NOT chronically absent. That rate is converted to an index by taking the percent not chronically absent and dividing by the subcomponent target. For example, a school having 90 percent of their students not chronically absent would receive an index of 97.43 (90/ 92.37).

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

The K-8 Access to Arts/Physical Education sub-component accounts for a base 4 percent of the overall index and indicates student access to the arts and physical education staff. The data in this component is sourced from the 2015-16 school year Registry of Educational Personnel data collection.

Full-time equivalency (FTE) values are used to compute a ratio of students to staff employed in the fine arts (dance, music, theater or perfor-mance, and visual arts) and physical education (health, physical education, recreation, and sex education). The subcomponent index is then cal-culated by taking the subcomponent target ratio and dividing it by the schools achieved ratio. For example, a school with a 200 students: FTE ratio would have an index of 72.5 (145/200).

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

The K-8 Access to Librarian/Media Specialist subcomponent accounts for a base 1 percent of the overall index and indicates student access to librarians and media specialists. The data in this component is sourced from the 2015-16 school year Registry of Educational Personnel data collection.

Full-time equivalency (FTE) values are used to compute a ratio of students to staff employed as librarians or media specialists. The subcomponent index is then calculated by taking the subcomponent target ratio and dividing it by the schools achieved ratio. For example, a

school with 200 students: FTE ratio would have an index of 72.5 (145/200).

### 11-12 Advanced Coursework

The advanced coursework subcomponent accounts for a base 3 percent of the overall index and is a measure of the percent of grades 11-12 students successfully completing advanced coursework geared toward career and/or college preparation (i.e., Dual Enrollment [dual], Early Middle College [EMC], Career and Technical Education [CTE] Program Completer, Advanced Placement [AP], and International Baccalaureate [IB] courses). Due to varying data system timelines in each of the many sources for this metric, the data in this component is sourced from the 2015-16 school year.

Students are counted as completing advanced coursework if they meet all the following criteria:

1. Enrolled in grade 11 or 12
2. Reported as successfully completing any one or more of the advanced coursework types (dual, EMC, CTE, AP, or IB) in any of the following systems:
   a. Michigan Student Data System (MSDS) Teacher-Student Data Link (TSDL) collection
   b. Student Transcript and Academic Record Repository (STARR) collection
   c. Career and Technical Education Information System (CTEIS)

The advanced coursework subcomponent calculates the percent of grade 11-12 students who have been reported as successfully completing one or more advanced courses. That percentage is converted to an index by dividing the percent completing advanced coursework by the subcomponent target. For example, a school having 45 percent of their grades 11-12 students completing advanced coursework would receive an index of 90.33 (45/49.82).

## Postsecondary Enrollment

The postsecondary enrollment subcomponent accounts for a base 2 percent of the overall index and measures the percent of students enrolling in postsecondary institutions within 12 months after graduation. Due to varying data system timelines and the natural timeline for the maturity of this metric, the data in this component is sourced from the 2014-15 school year.

This component uses the data collected by the Center for Educational Performance and Information (CEPI) and reported in their Postsecondary Outcomes by High School Report. This report counts a student as enrolling in postsecondary enrollment within 12 months after graduation if all the following criteria are met:

1. The student has graduated by earning a high school diploma

2. There is a matching record in Michigan's Student Transcript and Academic Record Repository (STARR) collection or national college enrollment data from the National Student Clearinghouse (NCS) showing the student has enrolled in a 2- or 4-year institution of higher learning

    a. Please note, most, but not all, colleges and universities provide data to NSC

3. The enrollment must be at least 6 months but no more than 12 months after graduation

The postsecondary enrollment subcomponent calculates the percent of graduates enrolling in postsecondary institutions. That percentage is converted to an index by dividing the percent of graduates enrolling in postsecondary institutions by the subcomponent target. For example, a school having 50 percent of their graduates enrolling in postsecondary institutions would receive an index of 67.48 (50/ 4.10).

## Graduation Rate Component

The graduation rate component accounts for a base 10 percent of the overall index and uses the same adjusted cohort calculation used in previous accountability systems (required under ESSA). Four-, five-, and six-year rates are calculated and used in determining an overall graduation rate for the school. The data in this component is sourced from the 2015-16 school year.

- **Four-year cohort** graduation rates represent the percent of students graduating on-track within 4 years of first entering high school.

- **Five-year cohort** graduation rates indicate the percent of students graduating on-track or off-track within 5 years of first entering high school. Early/middle college students successfully graduating with high school diplomas and early college certificates of completion/associates degrees within 5 years are considered on-time graduates.

- **Six-year cohort** graduation rates indicate the percent of students graduating on-track or off-track within 6 years of first entering high school.

An index is calculated separately for each graduation cohort. Then, cohort indices are combined by using the weights in the table below. The weights of missing cohorts are redistributed proportionately among the remaining cohorts.

| Graduation Rate Cohort | Weight in Graduation Rate Component |
|---|---|
| Four-Year Cohort | 50% |
| Five-Year Cohort | 30% |
| Six-Year Cohort | 20% |

## English Learner (EL) Progress Component

The English Learner (EL) progress component accounts for a base 10 percent of the overall index and aggregates the percent of English Learner (EL) students showing progress toward acquiring proficiency in English. The data in this component is sourced from the 2016-17 school year.

EL Progress is a new component of the accountability system under ESSA. Previously under NCLB and ESEA flexibility, EL progress was monitored through a separate accountability system (AMAOs - Annual Measurable Achievement Objectives). Now, ESSA includes EL progress in as a component of the larger school accountability system. The EL progress component measures English Learners' progress in acquiring proficiency in English. Students are counted as showing progress based on one of the following two pathways:

- Demonstrating adequate growth on WIDA Access
- Demonstrating English proficiency on WIDA Access (performance level of 4.5 or higher)

Adequate growth is a new metric describing the percent of students on a path to becoming proficient, or to toward maintaining proficiency, within a specific timeframe. For further details on adequate growth, please review the Growth Component section of this document.

*Example of EL progress calculation for three students*

| Student Performance Example | Performance Level Earned | Met English Proficiency? | WIDA ACCESS Growth Score | WIDA ACCESS Growth Target | Met Adequate Growth? | Met English Learner Progress (Met Proficiency / Adequate Growth)? |
|---|---|---|---|---|---|---|
| Student A | 4 | Yes | 32 | 41 | No | Yes |
| Student B | 3 | No | 61 | 55 | Yes | Yes |
| Student C | 2 | No | 40 | 65 | No | No |

The growth component includes data from the:

- assessments of WIDA Access
- grades of K-12
- only the overall score of WIDA Access

The WIDA Alternate Access assessment is not included as growth scores cannot be calculated for that assessment due to the small number of students taking it. Only the overall WIDA Access score is used in these calculations. In order for a WIDA Access score to be included, a student must have valid results in all four domains assessed (listening, speaking, reading, and writing).

Unlike the other components, the EL Progress component is not disaggregated by subgroup as it only applies to English Learner students. However, as with other components, only Full Academic Year students are included.

To emphasize the importance of assessing at least 95 percent of students, schools with participation rates below 95 percent will have their EL Progress rates adjusted (multiplied by the participation rate). An example of this is shown in the table below. The English Learner (EL) student group had a participation rate (i.e., Percent FAY Tested) of 90 percent. Therefore, their Percent Meeting Progress Rate is multiplied by their participation rate to get their Participation Adjusted Progress rate of 45 (90% x 50).

| Student Group | % FAY Tested | % Meeting Progress | Participation Adjusted Progress | % Target Met Proficiency (Target 59.26) |
|---|---|---|---|---|
| English Learners | 90% | 50% | 45% | 74.94% |

### Assessment Participation Component

The Assessment Participation component accounts for a base 3 percent of the overall index and aggregates assessment participation across assessments, grades, and content areas. It is unique in that it is the only component not explicitly required by ESSA (Sec. 1111)(c)(4)(B). However, ESSA (Sec. 1111) (c)(4)(E) requires assessment participation to be part of the system calculations. Therefore and so for compliance, transparency, and to make the Index System data more actionable, Michigan has decided to include Assessment Participation as a top-level component of the Index System. The data in this component is sourced from the 2016-17 school year.

There are two subcomponents within the accountability system. Both subcomponents function in the same manner; however, they cover different assessments. One of these subcomponents covers participation in the content area assessments (currently M-STEP, MI-Access, and SAT) and the other covers participation in the English language proficiency assessment (WIDA ACCESS for ELLs and WIDA Alternate ACCESS).

*The individual subcomponent weightings are given in the table below*

| Participation Subcomponent | Weight in Overall System |
|---|---|
| Content Area Participation | 2% |
| English Learner (EL) Participation | 1% |

### Summative Content Area Participation

The Content Area Participation subcomponent accounts for a base 2 percent of the overall index and aggregates student participation on the required content area assessments (currently M-STEP, MI-Access, and SAT) used to determine results within the proficiency and growth components. These assessments are required to be administered to all students in grades 3-8 and 11/12. Schools with 30 or more students in grades 3-8 and 11/12 are expected to test at least 95 percent of students enrolled in these grades.

### English Learner (EL) Participation

The English Learner (EL) Participation subcomponent accounts for a base 1 percent of the overall index and aggregates student participation on the required English Language Proficiency assessment (WIDA Access or WIDA Alternate Access). This assessment is required to be administered to all English Learner (EL) students in grades K-12. Schools with 30 or more EL students in grades K-12 are expected to test at least 95 percent of their enrolled K-12 EL student population.

## Component Weights

Federal law requires the components of Proficiency, Growth, English Learner (EL) Progress, and Graduation Rate as a group be given significantly more weight than the School Quality/Student Success component. To fulfill this requirement, the Michigan School Index System includes the component weightings shown in the table below. 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. This preserves the value placed on that component by the extensive stakeholder feedback that aided in the development of this system.

| Component | Weight in Overall School Index Value |
|---|---|
| Growth | 34% |
| Proficiency | 29% |
| School Quality/Student Success | 14% |
| Graduation Rate | 10% |
| English Learner Progress | 10% |
| Assessment Participation | 3% |

## ▌Overall School Index Value

The component weightings are used to combine individual component results into an overall 0-100 index for each school and for each of the school's student groups that meet minimum student, which is used to determine ESSA categories of support. Points used in the overall index are calculated by multiplying the component index (percent of the target met) by the component's weight. Points from each component are then summed to create an overall index value:

*(Component Index Target Met)  x  (Component Weight) = Component Weighted Points*
*Sum (Components' Weighted Points) = Overall School or Student Group Index*

*Example Overall School Index Calculation*

| Component | Composite Value (% Target Met) | Component Weight | Weighted Index |
|---|---|---|---|
| Growth | 80.00 | 34.00 | 27.20 |
| Proficiency | 50.00 | 29.00 | 14.50 |
| School Quality/Student Success | 90.00 | 14.00 | 12.60 |
| Graduation Rate | 90.00 | 10.00 | 9.00 |
| English Learner Progress | 60.00 | 10.00 | 6.00 |
| Assessment Participation | 100.00 | 3.00 | 3.00 |
| | | **Overall School-Level Index Value:** | **72.3** |

# Calculating Index Results

## ▌Overview

The Michigan Index System is designed not only to fulfill the ESSA requirements to identify specific categories of schools, but also to provide a diagnostic tool all schools "can use to identify the areas where they are performing well and those areas in need of further support. To that end, the Michigan Index System provides 0-100 indices for four levels:

- the building overall
- each student group
- each component
- each combination of student group and sub-element (content area, graduation cohort, or subcomponent) within each component

This section details the process of how overall building and student group indices are calculated. A one-page flowchart visually representing this process also available in Appendix B of this document.

## ▌ Calculation Process

The process to calculate indices for each of these four levels has five stages:

- gather component data
- calculate indices for each combination of student group and sub-element (content area, graduation cohort, and subcomponent) within each component
- calculate component-level indices
- calculate component weights
- calculate overall index

### Gather Component Data

First, the data for each of the system's six components must be collected.

- Growth
- Proficiency
- School Quality/Student Success
- Graduation Rate
- English Learner (EL) Progress
- Assessment Participation

Assessment Participation has two subcomponents:

- Summative Content Area Participation (for M-STEP, MI-Access, SAT)
- English Learner (EL) Participation (for WIDA Access and WIDA Alt. Access)

School Quality/Student Success has five subcomponents:

- K-12 Chronic Absenteeism
- K-8 Access to Arts/Music/Physical Education (PE)
- K-8 Access to Librarians/Media Specialists.
- 11/12th Advanced Coursework
- Postsecondary Enrollment of Prior Grade 12 Students

### Calculate Indices for Each Combination of Student Group and Sub-Element

Once the data for all components are collected, indices are calculated for each combination of student group and sub-element (content area, graduation cohort, or subcomponent) within each component.

This is done by taking the component measure and dividing that value by the component target. For example, in the table below the Participation Adjusted Proficiency for the Black/African American student group is 50 percent. The target value is 60 percent so the index for that student group is 83.33 percent (50/60).

Please note that the participation adjustment described earlier for Growth, Proficiency, and EL Progress is applied at this step. Participation adjustments are applied to any combination student group and content area having a participation rate of less than 95 percent.

*Example Proficiency Student Group and Content Area ELA Index Calculation*

| Student Group | % FAY Tested | % Proficient | Participation Adjusted Proficiency | Index (% Target Met) Target = 60% |
|---|---|---|---|---|
| All Students | 96% | 50% | 50% | 83.33% |
| American Indian/Alaska Native | - | - | - | - |
| Asian | - | - | - | - |
| **Black/African American** | **96%** | **50%** | **50%** | **83.33%** |
| Hispanic/Latino | - | - | - | - |
| Native Hawaiian/Other Pacific Islander | - | - | - | - |
| Two or More Races | - | - | - | - |
| White | 90% | 50% | 45% | 75.00% |
| Economically Disadvantaged | 95% | 50% | 50% | 83.33% |
| English Learners | - | - | - | - |
| Students with Disabilities | 96% | 50% | 50% | 83.33% |

### Calculate Component Indices

After indices for each combination of student group and sub-element (content area, graduation cohort, or subcomponent) are calculated, they are rolled up to component indices, both for the building overall and for each student group.

### Calculate Student Group Component Indices

First, within each student group, any sub-elements (content area, graduation cohort, or subcomponent) are combined to get a single index for the student group.

The process for combining sub-elements varies for each sub-element.

- **Content areas** are combined by a weighted average based on the number of tests taken in each content area (shown in the table below).
- **Graduation cohorts** are combined by a weighted average based on the policy weights assigned to each cohort. Weights are proportionally redistributed for missing cohorts.
- **Subcomponents** are combined by a weighted average based on the policy weights assigned to each subcomponent. Weights are proportionally redistributed for subcomponents.

*Example Proficiency Student Group Index Calculation*

| Content Area | Content Area Index (% Target Met) | Total Tests Taken in All Content Areas | Tests Taken in This Content Area | Content Area Weight | Weighted Points |
|---|---|---|---|---|---|
| ELA | 75.00 | 1,000 | 490 | 49.00 | 36.75 |
| Math | 80.00 | 1,000 | 510 | 51.00 | 40.80 |
| | | | Student Group Overall Proficiency Index | | 77.55 |

### Calculate a Single Index for the Component

Then a building component index is calculated by taking the unweighted average of all student group indices within the component.

*Example Proficiency Building Index Calculation*

| Student Group | ELA | Math | Combined |
|---|---|---|---|
| All Students | 83.33% | 92% | 87.67% |
| American Indian/Alaska Native | - | - | - |
| Asian | - | - | - |
| Black/African American | 83.33% | 88% | 85.67% |
| Hispanic/Latino | - | - | - |
| Native Hawaiian/Other Pacific Islander | - | - | - |
| Two or More Races | - | - | - |
| White | 75.00% | 80% | 77.55% |
| Economically Disadvantaged | 83.33% | 74% | 78.76% |
| English Learners | - | - | - |
| Students with Disabilities | 83.33% | 76% | 79.67% |
| Building Overall Proficiency Index | | | 81.86% |

### Calculate Component Weights

Once index values have been calculated for all available components, weights need to be applied to each component. Schools that do not have all components will have weights from the missing components proportionally redistributed to the school's existing components. The table below shows a few examples of how weights are redistributed for missing component.

*Example Weighting Cases*

| Component | Example 1:<br><br>Component Weighting with All Available | Example 2:<br><br>Component Weighting with No Graduation Rate | Example 3:<br><br>Component Weighting with No Graduation Rate or EL Progress |
|---|---|---|---|
| Growth | 34.00% | 37.78% | 42.50% |
| Proficiency | 29.00% | 32.22% | 36.25% |
| School Quality/Student Success | 14.00% | 15.56% | 17.50% |
| Graduation Rate | 10.00% | n/a | n/a |
| EL Progress | 10.00% | 11.11% | n/a |
| Participation | 3.00% | 3.33% | 3.75% |

## Calculate the Overall Index

The last step is calculating a weighted index value for each component and summing the results. This is done both for the building overall and for each student group. The table below provides an example of calculating a weighted index value and summing the results.

| Component | Component Value (% of target met) | Component Weight | Weighted Index Value |
|---|---|---|---|
| Growth | 80.00 | 34.00 | 27.20 |
| Proficiency | 50.00 | 29.00 | 14.50 |
| School Quality/Student Success | 90.00 | 14.00 | 12.60 |
| Graduation Rate | 90.00 | 10.00 | 9.00 |
| EL Progress | 60.00 | 10.00 | 6.00 |
| Participation | 100.00 | 3.00 | 3.00 |
| | | **Overall Index:** | **72.30** |

# Long-Term Goals & Component Targets

ESSA requires states to set long-term goals for their state-wide accountability systems. To aid in the process, Michigan has set targets for each component in the Index System. These targets are set at the value of the 75th percentile for that component in the baseline year (2016-17). This sets challenging but achievable component targets. This is because, by definition, 75 percent of schools are not yet fully meeting the target (challenging) but 25 percent of schools are already meeting the target (achievable).

Michigan's long-term goals are set using the component targets as anchors. These long-term goals are to increase performance in each component so that the statewide average in 2024-25 will be at or above that component's target (i.e., the value of the 75th percentile from the baseline year [2016-17] for that component). The endpoint of 2024-25 is chosen to align the ESSA long-term goals with Michigan's Top 10 in 10 goals.

Long-term goals and component targets will remain constant up through 2024-25 unless changes in source data or components used require these targets to be reset.

The table on the following page gives the baseline statewide average and the target/long-term goal for each component of the Michigan School Index System.

| Component | Baseline (2016-17) Statewide Average | Component Targets (2016-17 75th Percentile) & Long-Term Goal Statewide Average (2024-25) |
|---|---|---|
| Proficiency – ELA | 49.14% | 60.00% |
| Proficiency – Math | 37.55% | 47.55% |
| Growth – ELA | 49.99% | 57.92% |
| Growth – Math | 43.49% | 49.90% |
| Graduation – 4-year | 79.79% | 94.44% |
| Graduation – 5-year | 81.99% | 96.49% |
| Graduation – 6-year | 81.25% | 97.00% |
| English Learner Progress | 46.41% | 59.26% |
| School Quality/Student Success – On-Track Attendance | 87.41% | 92.37% |
| School Quality/Student Success – Advanced Coursework | 27.96% | 49.82% |
| School Quality/Student Success – Postsecondary Enrollment | 62.50% | 74.10% |
| School Quality/Student Success – K-8 Access to Arts and Physical Education | 198.4:1 | 145.00:1 |
| School Quality/Student Success – K-8 Access to Librarians and Media Specialists | 8312.50:1 | 8312.50:1 |

# School Identification for Supports

As part of the effort to build a mind-set of continuous improvement and to help states progress toward meeting their long-term goals, ESSA establishes three categories of schools that states must identify for supports and interventions. These categories are Comprehensive Support Improvement, Additional Targeted Support, and Targeted Support Improvement.

### Comprehensive Supports and Improvement (CSI)

ESSA defines Comprehensive Support schools as:

- the lowest performing 5 percent of schools
- any high school with a graduation rate of 67 percent or less
- any school previously identified as Additional Targeted Support that did not exit that status

CSI schools are those with the broadest and deepest challenges and that will receive the greatest degree of support and interaction from the state. Schools in this category are identified once every three years.

School districts will need to work with their schools and the state where applicable to determine the unmet needs of the school and to develop a plan to meet those needs. This plan is monitored by the state educational agency (SEA). The district will be given a state-determined amount of time to show improvement of the school. If at the end of that time sufficient progress has not been made, then more rigorous actions as determined by the state must be taken.

### Additional Targeted Supports (ATS)

ESSA defines Additional Targeted Support schools as:

- schools having student groups performing like the lowest performing 5 percent of schools

Additional Targeted Support schools have a profound challenge with three or more student groups. These schools will primarily receive further supports from their local district unless improvements are not made in a state-determined timeframe, at which point they will be migrated to CSI status identified once every three years.

ATS schools must identify the need(s) 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 group and if sufficient progress has not been made in that time the school will become a Comprehensive Support school.

### Targeted Support and Improvement (TSI)

ESSA defines Targeted Support and Intervention schools as:

- schools having underperforming student groups

TSI schools have a deep challenge with one or two student groups. They will primarily receive further supports from their local district. Schools in this category are identified annually.

Schools must identify the need(s) of the recognized 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 in that time the district must determine what additional actions are appropriate.

# Index System Preview Window

A month-long courtesy preview window of the Michigan School Index System will open to authorized users in the Secure Site on February 26, 2018. The Michigan School Index System will be publicly released on www.mischooldata.org in late-March or early-April. For instructions on how to become an authorized Secure Site user, please see the Index System Access section of this document.

## ▌ Accountability Issues

During the Index System preview window, schools or districts may securely communicate perceived issues or concerns regarding their accountability data through the Accountability Issues portion of the Secure Site.

1. Login to Secure Site (www.mi.gov/oeaa-secure).
2. Find and hover over the Accountability tab at the top of the home page of the Secure Site.
3. Click on Accountability Issues.
4. Change the Academic Year to the latest year available.
5. Select the desired ISD, District, and School.
6. Click the [Create Accountability Issues] button.

All Accountability issues must be submitted in the Secure Site **by 5:00 p.m. on Monday, March 26, 2018**. Please refer to the Accountability Issues section later in this guide for more information.

Please be aware that only issues relating to how the aggregated data will be able to be considered at this point in the data cycle. Issues relating to the quality of sourced data for the Index System components will not be considered during the Index System preview window. Each data component included in the Index System has had its own submission/review window, in its respective source data system. Schools and districts were able to make necessary corrections to the staff, student, and course-level data during their respective submission/review windows. The availability of each component review window is communicated to the individual school and district personnel that the districts reported as the appropriate contacts for that role in the state's Educational Entity Master (EEM). All source data are considered accurate and final at the time of the Index System preview window, and no further requests for changes to these data will be considered.

Below is a list of the various components of the Michigan School Index System and their associated source collection or verification system.

| Component | Agency | Collection/Verification System(s) Used |
|---|---|---|
| Assessment Data (Proficiency, Growth, Progress, Participation) | MDE/Office of Assessment & Accountability | Secure Site |
| Enrollment and Demographic Data | CEPI/MDE/Office of Assessment & Accountability | MSDS, Secure Site |
| Graduation and Attendance Data | CEPI | MSDS |
| Staff Data | CEPI | MSDS, REP |
| Student Course Data | CEPI | MSDS-TSDL, CTEIS, Student Transcript and Academic Record Repository(STARR) |
| Postsecondary Data | CEPI, National Student Clearinghouse (NSC) | STARR, NSC |

# Index System Access

## Secure Site Access

The Michigan School Index System preview window will open to authorized users in the Secure Site on February 26, 2018. To access a school's preview data in Secure Site, users must have a Michigan Education Information System (MEIS) account and have Secure Site access approved by the school's district. To create a new MEIS account or to reset the password to an existing account, use the MEIS User Management page (https://mdoe.state.mi.us/meis/).

To request Secure Site access for a school:

- go to the Secure Site login page (www.mi.gov/oeaa-secure)
- enter your MEIS ID and password into the Secure Site login page
- click login
- click the "Request Access to Secure Site" button in the lower right
- select the Role, ISD, District, and School(s) for which you are requesting Secure Site access
- click the "Request Access" button

The request will be sent to the designated Secure Site district administration level user. After it has been reviewed and either approved or rejected, the user will receive an email notifying them of the final status of their access request

## Public Access

After the secure preview window, the Michigan School Index System will be publicly released on www.mischooldata.org in late March or early April.

# Additional Resources

For additional resources supporting and describing the Michigan School Index System, visit www.mi.gov/mde-accountability. Specifically, review the document "2017 Michigan School Index System Resource Toolkit," which provides a list and description of the resources supporting the system.

# Contact Us

For questions or concerns, please contact MDE accountability unit at 877-560-8378, option 3 or by emailing MDE-Accountability@michigan.gov.

# Appendix A – Display Mockup

Michigan School Index System Display mockup of what will be published on MISchoolData.org.

# Appendix B – Index Calculation Flowchart
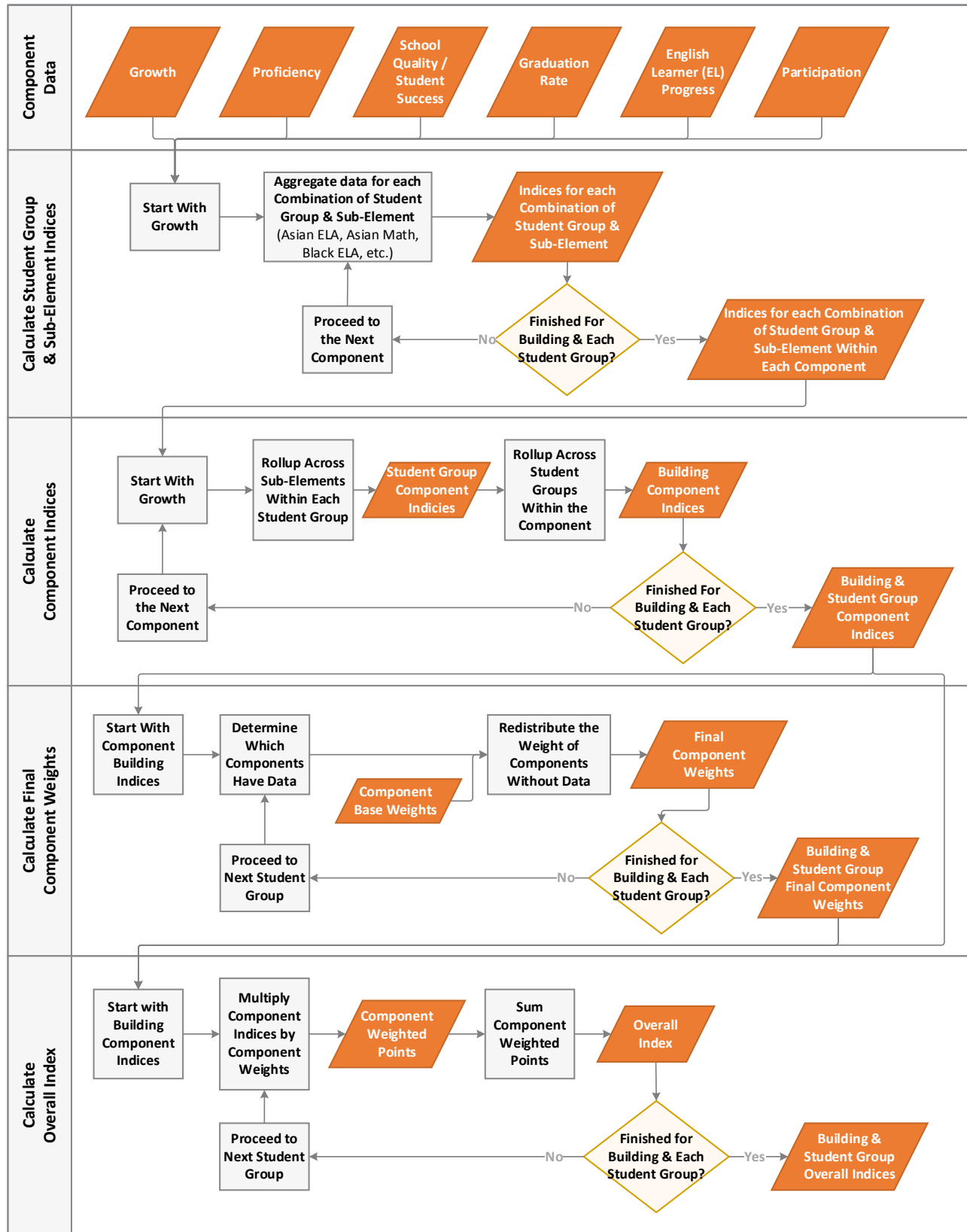
## Contact Us

The Office of Educational Assessment and Accountability is responsible for producing the Michigan School Index System. We are happy to answer any questions or concerns you may have.

Phone: 877-560-8378

Email: **mde-accountability@michigan.gov**