



# Measuring Student GROWTH

*If only it was as simple as measuring the height of a child over time.*

*Student Learning Objectives*

by  
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1:15 till 4:15 pm

## Student Growth (SGP & SLO)

- **What** is meant by student growth from experts, other states and MI law?
- **Why should we care** about a Student Learning Objectives (SLOs)?
- **How** might we better understand Student Growth Percentiles (SGPs)?
- **How** do we guide the implementation of the SLO process?

Fist to Five:



## Student Growth Defined

*simply and clearly defined...*

*student growth is the measure of academic achievement of a single student or a group of students across two or more points of time.*

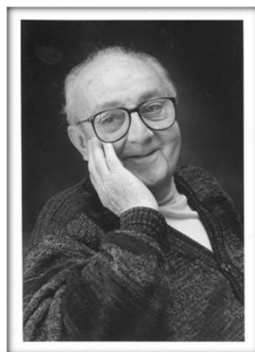
*(Batelle, 2011) (Castellano & Ho, 2014)*

*(Marzano & Toth, 2013)*



**SAME Students,  
NOT same test needed.**

## Before we start, a profound quote

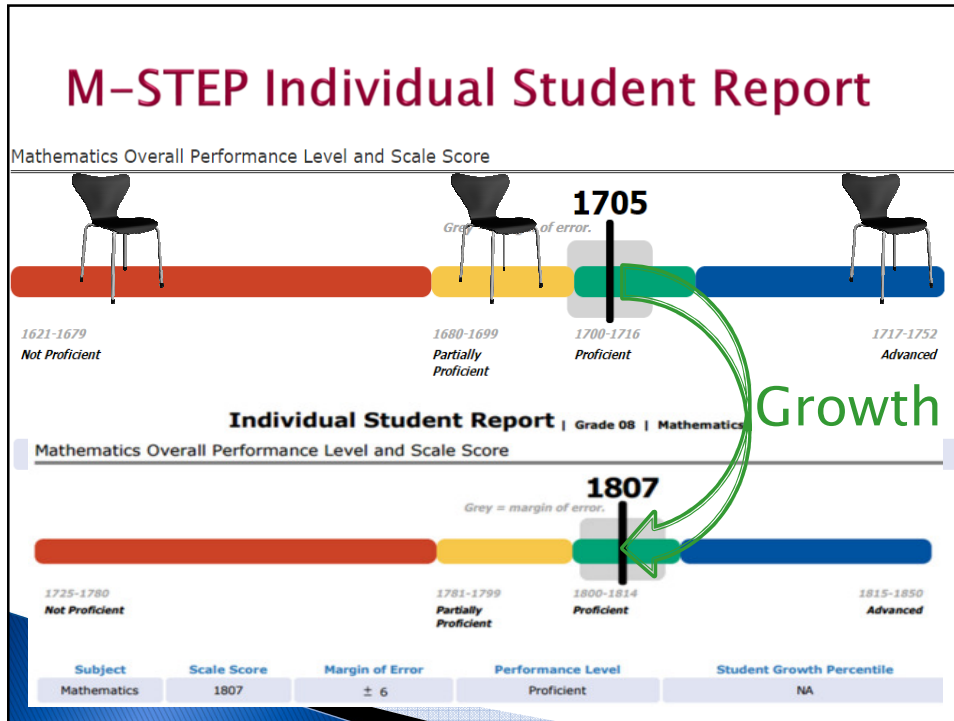


“...essentially, all models are wrong,  
but some models are useful.”

-George E.P. Box

### Seven Ways to Measure Academic Growth

- The Gain Score Model
- The Trajectory Model
- The Categorical Model
- The Residual Gain Model
- The Projection Model
- The Student Growth Percentile Model
- The Multivariate Model



## Delta Math Sample SLO Target

For an "Effective" rating for this SLO:

Tiered Groups	Delta Math 5 <sup>th</sup> Grade Readiness (e.g. 4.NF.4b)	Delta Math 6 <sup>th</sup> Grade Readiness (e.g. 5.NF.7b)	Student Initials	# of students
<b>Advanced</b>	Met benchmark on all 6 readiness standards	Met benchmark on all 7 readiness standards	DG, SK, AT, KU	4
<b>Benchmark</b>	Met benchmark on all 6 readiness standards	Met benchmark on at least 6 readiness standards	TA, IB, LC, JD, MG, RL, MM, DS, HS, TS, , WV	11
<b>Targeted / At-Risk</b>	Met benchmark on all 6 readiness standards	Met benchmark on at least 5 readiness standards	DB, BC, RD, CD, AbH, AIH, SK, TM, BS, DS, YV, FV	12
<b>Intensive</b>	Met benchmark on at least 4 readiness standards	Met benchmark on at least 3 readiness standards	ZG, JT, VW	3
	Near Proficient	readiness standards	AIH, SK, TM, BS, DS, YV, FV	
<b>Intensive</b>	Near Proficient OR Not Proficient	Met benchmark on 0, 1 or 2 readiness standards	ZG, JT, VW	3

*(Note: The Delta Math Course Overview report can be used to identify the number of readiness standards that each*

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## Practical School Improvement Timeline for Michigan

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WELCOME!

siTimeline.com

This website publication is a result of a collaborative effort between school improvement consultants across the state of Michigan. Our hope is to place in the hands of teachers, administrators, and all members of educational communities a practical timeline and related resources for the school improvement cycle. The left menu contains three different methods of site navigation with side menu bars that should "pop out" as you scroll over them. We suggest visiting the "Getting Started" page and/or the MVU online overview if you're new to the process. Veterans may wish to jump into the required reports (left menu) or the current 2015/16 monthly checklist which is now a live PDF version is also still available 2014/15 month-by-month checklist (PDF).

Accountability

Reading Now Network Data

Ed Evaluations

- SLO Introduction

- SLO Cycle or Process

- SLO Writing Guidance

School Improvement 101 is an online tutorial through MVU with 10 SCECHs!

MVU DIRECTIONS

or Orange Font word/phrase is a hyperlink that will take you elsewhere in the site or to

### About the Graphic

While systemically implementing the school improvement cycle, we often draw parallels to a Multi-Tiered System of Support (RtI): we screen a child in an attempt to "Define the Problem" they may have in a particular area; once we have diagnosed the problem, we "Develop a Plan" based on research and best-practice. Of course, those involved will want assurances that the plan is "Implemented" with fidelity, and the child's progress is monitored or "Evaluated." This process is repeated multiple times throughout the year, as you'll see represented in the graphic to the right. There exists a basic truism: that what works

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## Practical School Improvement Timeline for Michigan

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Student Growth for Educator Evaluations

There are states who have successfully implemented different growth models through continuous stakeholder involvement and assuring the evaluation process focuses on teacher engagement and effective feedback. There are 18 Race to the Top (RTT) who were given millions of dollars to implement student growth into educator evaluations, among other requirements for the federal grant. Most of these states have moved away from a "simple or gain score model" to primarily one of three alternatives: Value-Added Models (VAM), Residual Gain Model, or Student Growth Percentiles (SCP), learn more about SGP from the video on the right.

For a more comprehensive review, read [Research on Student Growth for Ed Evals](#) by Doug Greer, August, 2014.

Virginia Student Growth ...

Of course, the bulk of the research paper discussed how exemplary states such as Colorado balance student growth and student achievement. The student profile on the left shows how an individual student achieved over a three year period by placing a white dot at one of four levels: Developing, Approaching, Meets, Exceeds. The colored arrows describe how the student grew (SGP) relative to others across the state: **Low growth (red)**, **Average (white)**, **High growth (green)**. Finally, there is a projection band for the next year depending on if the student demonstrates high, average, or low growth.

Colorado Department of Education has **five guiding principals for evaluating educators fairly**:

1. Data should inform decisions, but human judgment will always be an essential component of evaluations.
2. The implementation and evaluation of the system must embody continuous improvement.
3. The purpose of the system is to provide meaningful and credible feedback that improves performance.
4. The development and implementation of the evaluation systems must continue to involve stakeholders in a collaborative process.
5. Educator evaluations must take place within a larger system that is aligned and supportive.



# Growth with State Tests ...

## *Abstract on Student Growth for Evaluations*

In May, 2014, administrators and one anxious, **second year teacher** awaited the state assessment results of the MME. State law required 25% to be tied to student growth/achievement and the MME scores would make the difference between Effective or Highly Effective. If she were merely effective, she would be laid off based on the tie-breaker of seniority. The irony is that the MME is given to 11<sup>th</sup> grade students and since she teaches 9<sup>th</sup> grade social studies, she never had a chance to make an impact on the students who would determine her employment status. Based on countless stories like this, some organizations and states have called for a moratorium on states and local districts to cease the use of student growth data based on statewide assessments during this time of standard and assessment transition.

Student Growth is NOT how a group of 11<sup>th</sup> grade scores have trended over time as seen on MI School Data. The universal definition for student growth is achievement measured across two points of time for the same student or group of students. There are basically four models for measuring student growth various states have utilized over the past decade.

**Simple Gain/Growth Model:** No longer used in most RTT States though still used in Michigan, it is the most intuitive measure which is two tests taken to determine the growth. Shortcomings include: dependent on valid test scores, measurement error, and ignores other factors such as language, disabilities, and poverty. Michigan's current model of Performance Level Change drives funding where 61% of schools shift funding from one year to the next, causing questions in the reliability of the system.

**Residual Gain Model:** Only used by one RTT State (Delaware) and runs much like the other two models that are more widely accepted as valid and reliable. Basically calculates a line of best fit based on previous scores and the newest score, those who fall above the line are above average and below the line are below average. Students are also grouped by ELL and SWD.

**Student Growth Percentiles:** SGPs are generally accepted as valid and reliable for large groups of students and inferring effectiveness of a teacher. Student data is used as students are essentially grouped based on previous score on the assessment and the new assessment is measured relative to how others scored who had a similar starting point. Other criteria such as ELL, SWD, and/or ED can also be calculated at the local level.



Local SLOs

State SGPs

# Student Growth Percentiles

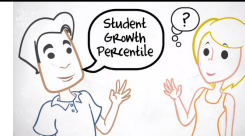
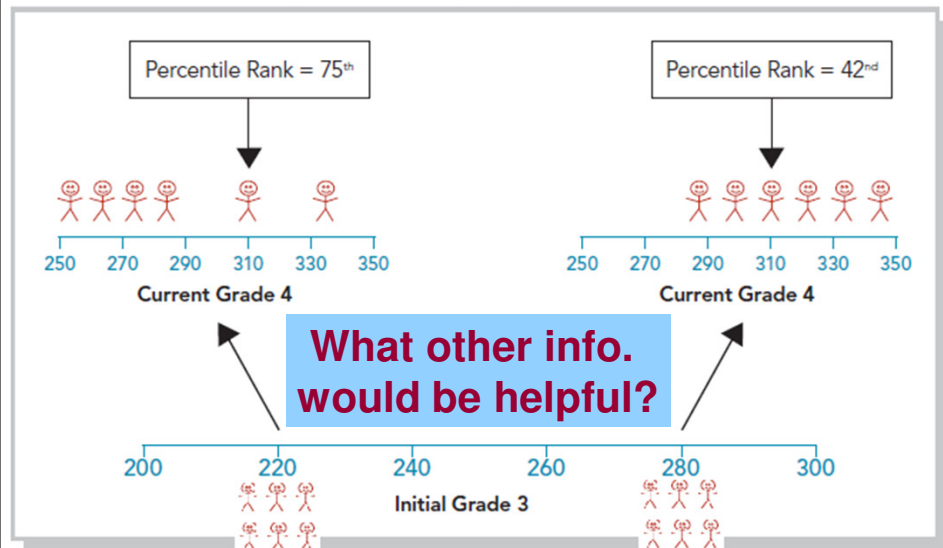
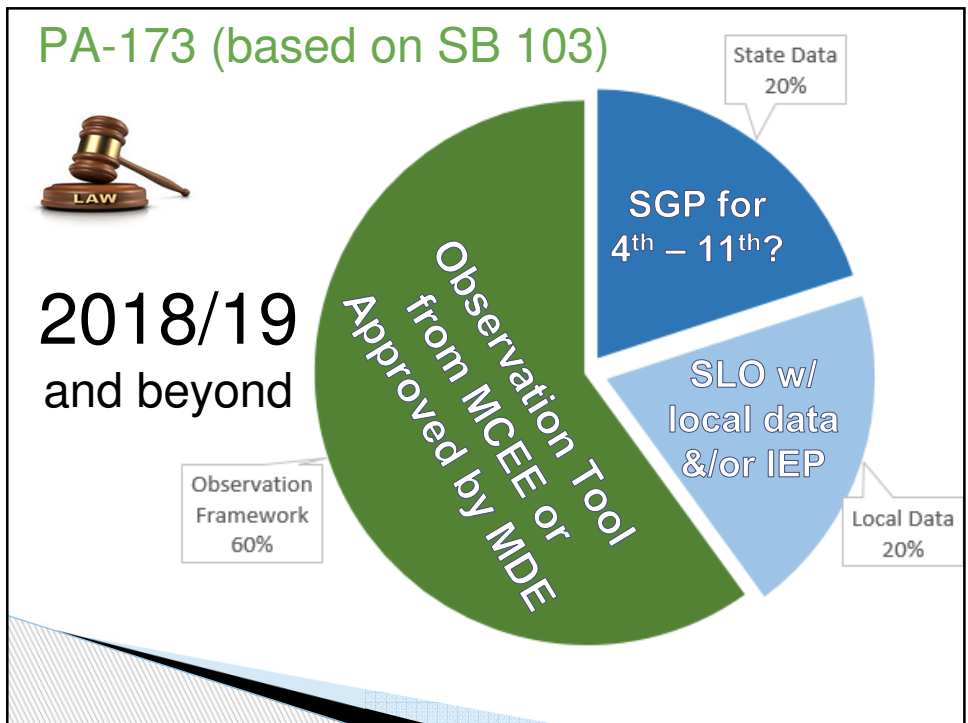
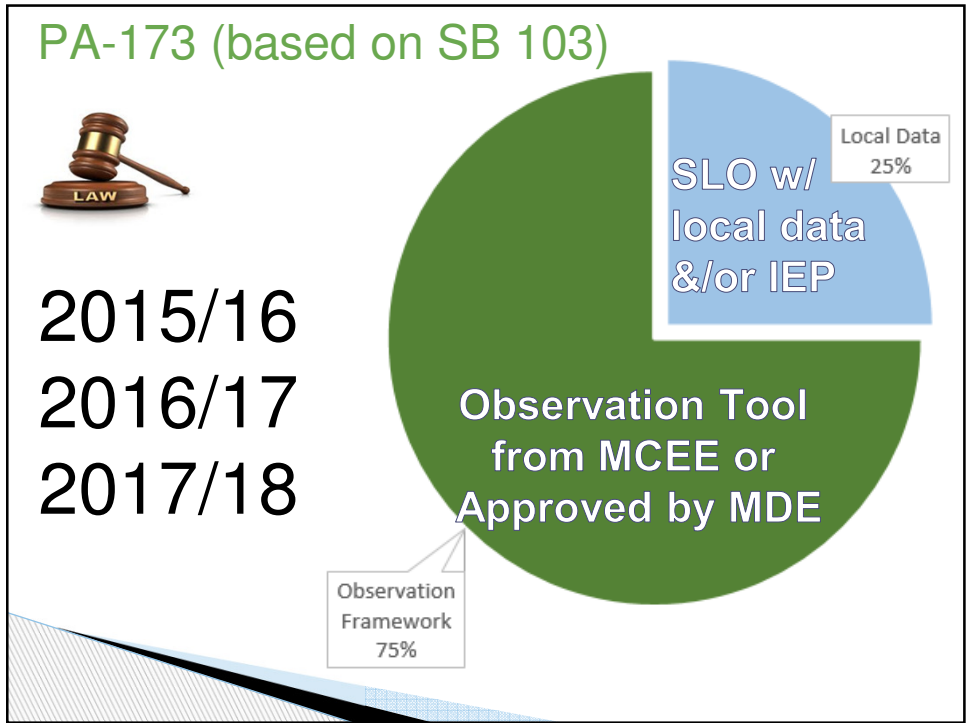


Illustration of a Heuristic Approach to Computing Student Growth Percentiles



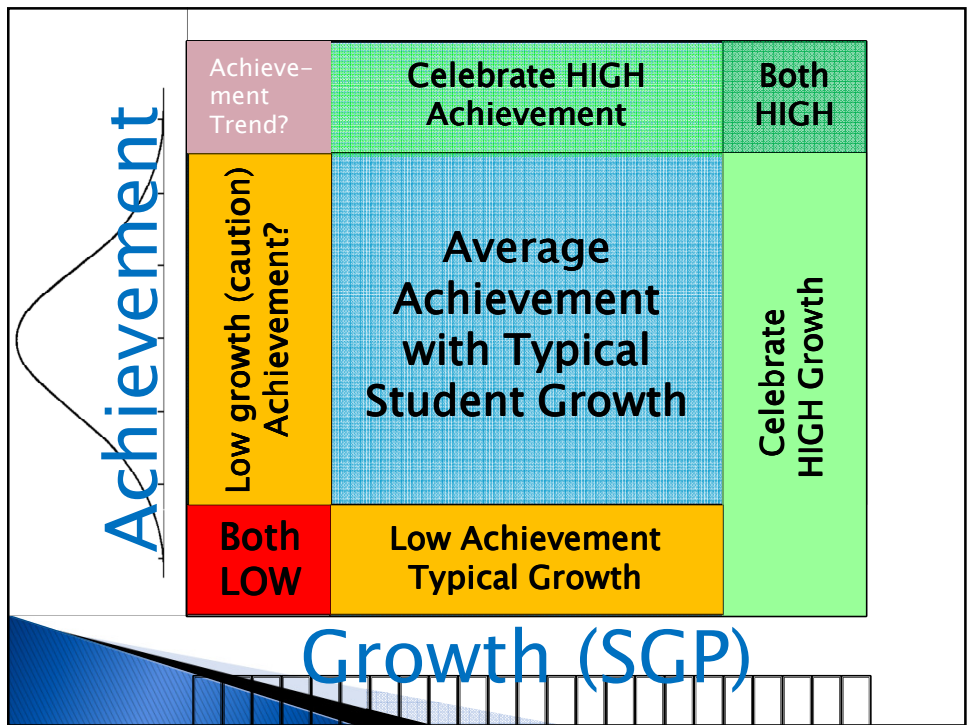


## Public Act 173 (SB 103)

November 5, 2015

Sec. 1249. (1) Subject to subsection (4), with the involvement of teachers and school administrators, the board of a school district or intermediate school district or board of directors of a public school academy shall adopt and implement for all teachers and school administrators a rigorous, transparent, and fair performance evaluation system that does all of the following:

(c) Evaluates a teacher's or school administrator's job performance, using multiple rating categories that take into account student growth and assessment data. Student growth must be measured using multiple measures that may include student learning objectives, achievement of individualized education program goals, nationally normed or locally developed assessments that are aligned to state standards, research-based growth measures, or alternative assessments that are rigorous and comparable across schools within the school district, intermediate school district, or public school academy. If the performance evaluation system implemented by a school district, intermediate school district, or public school academy under this section does not already include the rating of teachers as highly effective, effective, minimally



**MDE at MERA, Nov. 2015**

## Some Limitations of SGPs

- We can't assume that teacher's are the sole or even majority cause of SGP variation.
  - Major events/disruptions may play a role, for example
- SGP data will be much less precise this year due to the assessment transition.
  - Change in standards, assessments, delivery mode, and time of year.
  - Longer than normal gap between tests.

## BAA Secure Site – Student Data File

	B	F	I	Q	V	AE	AI	AJ	AK	AL	AM	AN
1	ISDCod	Grade	Middle	SE	Conten	Standar	FormFix	FormPT	SS	SSSE	PL	SGP
93	70000	4 C		1 EL	1	3	1	1354	9	1	10	
95	70000	4 A		0 EL	0	1	2	1356	9	1	2	
201	70000	4 F		0 EL	0	2	3	1360	8	1	1	
209	70000	4 P		1 EL	1	3	1	1363	8	1	12	
218	70000	4 Z		1 EL	1	2	3	1366	8	1	24	
220	70000	4 M		0 EL	0	1	2	1367	8	1	21	
226	70000	4 H		1 EL	1	1	2	1370	8	1		
228	70000	4 R		1 EL	0	1	2	1370	8	1	8	
236	70000	4 G		0 EL	0	3	1	1374	7	1	40	
238	70000	4 L		0 EL	0	1	2	1375	7	1	25	
243	70000	4 L					1	1377	7	1	9	
244	70000	4 R					1	1377	7	1		
245	70000	4 M					3	1378	7	1	26	
249	70000	4 G					3	1378	7	1	79	
259	70000	4 J					3	1380	7	1	41	
268	70000	4 R					1	1381	7	1	4	
282	70000	4 D					3	1386	7	2	18	
283	70000	4 J		0 EL	0	2	3	1386	7	2	10	

Avg. SGP  
53.7

↓

StudentDataFile SAMPLE 2015

READY 107 OF 819 RECORDS FOUND      AVERAGE: 53.74757282      COUNT: 104      SUM: 5536



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### Student Growth for Educator Evaluations

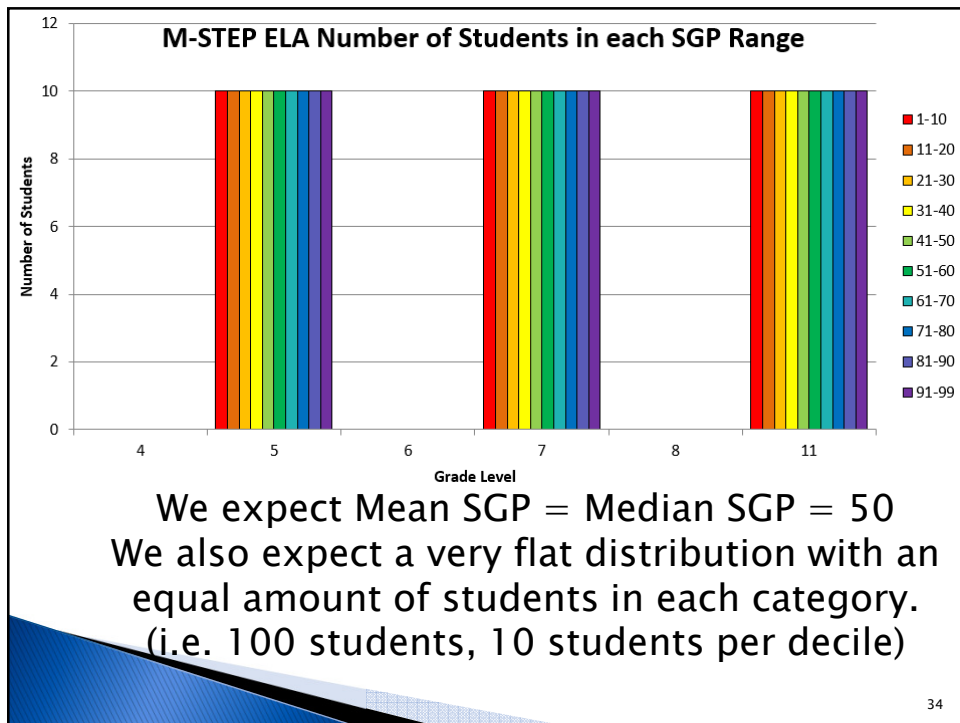
There are states who have successfully implemented different growth models through continuous stakeholder involvement and assuring the evaluation process focuses on teacher engagement and effective feedback. There are 18 Race to the Top (RTT) who were given millions of dollars to implement student growth into educator evaluations, among other requirements for the federal grant. Most of these states have moved away from a "simple or basic score model" to primarily one of three alternatives: Value-Added Models (VAM), Residual Gain Model, or Student Growth Percentiles (SGP), learn more about SGP from the video on the right.

For a more comprehensive review, read [Research on Student Growth for Ed Evals](#) by Doug Greer, August, 2014.

#### Understanding 2015 Student Growth Percentiles from BAA

Although the BAA Secure Site released SGPs for individual students (4th - 11th grade) in **January, 2016**, we **concur with the strong recommendation of MDE that SGPs should NOT be used for educator evaluations in 2015/16**. In fact, the current law (PA-173) does not require the use of SGPs until 2018/19 which allows three more years to stabilize state-level data. BAA has released the SGPs in order for educators to familiarize themselves with the data prior to high-stakes use in 2018/19.

A few key points to understand, SGPs across the state are NOT a normal distribution (bell-shape curve), in fact, the distribution is expected to have an equal number of students at each percentile (the diagram on the right shows grouping of 10 or deciles). In this



MDE at MERA, Nov. 2015

## Educator Evaluations

- SGP's have been used in multiple states for Educator Evaluations.
- The most common aggregation for Ed Eval is taking the median of a group of SGP's. In the literature, these are called Median Growth Percentiles, or MGPs.
- The SGP's from the 2015 M-STEP shouldn't be used for any educator evaluations.


## Guiding Principles for Ed Evals



1. Data should inform decisions, but **human judgment** will always be an essential component of evaluations
2. The implementation and evaluation of the system must embody **continuous improvement**.
3. The purpose of the system is to provide **meaningful and credible feedback** that improves performance.
4. The development and implementation of the evaluation systems must continue to **involve stakeholders in a collaborative process**.
5. Educator evaluations must take place within a larger system that is **aligned and supportive**.


MDE Memo September 10 and  
MDE Special Pops Conference Sept 24

# What is an SLO?




- An SLO is a measurable, long-term, academic goal informed by available data that a teacher or teacher team sets at the beginning of the year for all students or for subgroups of students.

8




## Student Learning Objective (SLO) is a framework for student growth




### MDE FAQ

(1 of 3 MDE docs)



**Measuring Student Growth:  
An Introduction to Student Learning Objectives**



**What is an SLO?**  
A student learning objective (SLO) is a measurable, long-term, academic goal, informed by available data, that a teacher or teacher team sets at the beginning of the year for all students or a subset of students. SLOs are focused on the most valuable learning that takes place in a course. They are specific and measurable goals that are based on student data and aligned to curriculum standards.

**Who should use SLOs?**  
Teachers of any grade and subject who seek to measure the academic growth of their students might benefit from the use of SLOs.

**Why use SLOs?**  
Education legislation in Michigan requires that the student growth and assessment component of a teacher's evaluation consist of the state student growth and assessment measurement standards and a local student growth assessment. SLOs are one way to measure the academic growth of students.

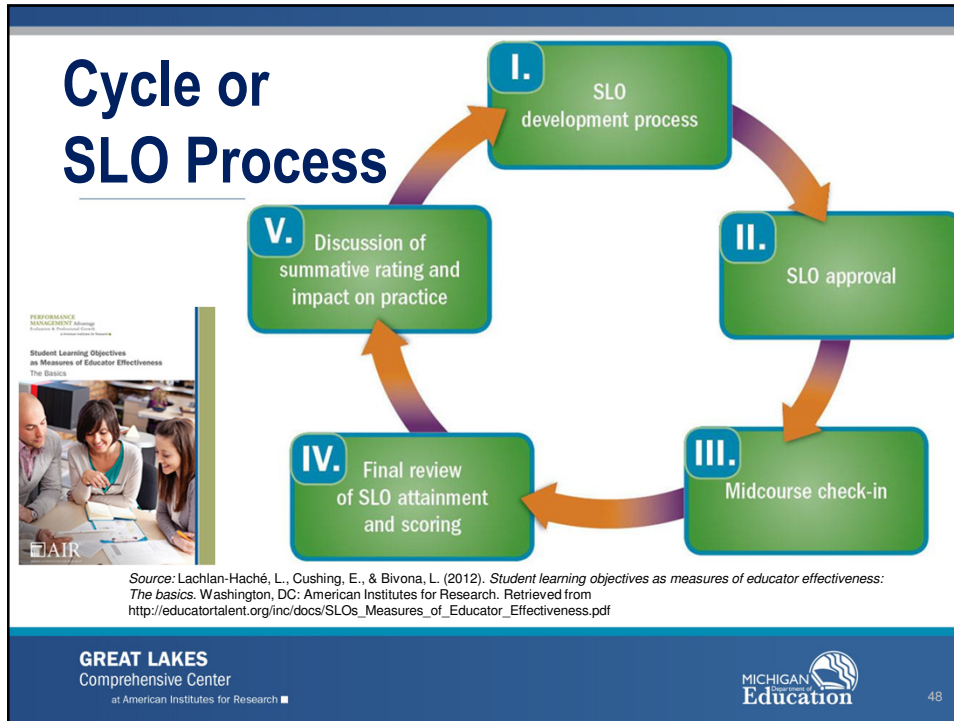
**How are SLOs being used and implemented?**  
States and districts across the country currently use SLOs as one measure in their educator evaluation system because of the strengths of the SLO process. A review of publicly available documents found that 35 states have policies or recommendations related to the use of SLOs in their evaluation systems.

**What are potential strengths of the SLO process?**  
Some of the reasons the SLO process is used so widely are because SLOs are:

- **Versatile.** SLOs can be used to measure student growth for all teachers, not just those teachers in tested grades and subjects.
- **Teacher driven.** The use of SLOs allows teachers to set goals for their students, thus playing a critical role in their own evaluations.
- **Adaptable.** As schools implement new standards and curriculum, SLOs can still be used to measure student learning.

**What does research say about SLOs?**  
Early research on the SLO process is limited, but some studies show promise. In one study, teachers reported that the SLO goal-setting process helped them become more focused on student achievement and data use. As a result, the teachers employed more evidence-based practices (Community Training and Assistance Center, 2013). In two recent evaluations of

Michigan Department of Education      Measuring Student Growth: An Introduction to SLOs—1  
1374.09/15



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*siTimeline.com*

How do we fairly and consistently attach student growth and achievement data to educator evaluations?

**Imagine a teacher coming to you at the beginning of the year with a simple request: Is my student growth goal for this year sufficient to receive the highest ranking on the growth portion if I meet my goals?** According to the American Institute of Research (AIR), 60% of our states across the nation answer this question regarding student growth with non-tested content/grades by using a PROCESS to create Student Learning Objectives (or SLOs). Several of the 18 Race to the Top states require SLOs for all teachers (core and non-core).

**NEW Michigan law (PA-173) for Educator Evaluations**      **Voice of Educators from Rhode Island on SLOs**

PA-173 passed into law (November 5, 2015) stating evaluations for "teacher's or school administrator's job performance, using multiple rating categories that take account data on student growth and assessment data. Student Growth must be measured using multiple measures that may include Student Learning Objectives, achievement of IEP goals, nationally normed or locally developed assessments that are aligned to state standards, researched based growth measures or alternative assessments that are rigorous and comparable across schools within the

**Implementing SLOs in R...**

It was like a light bulb that came on like, "Why are we leaving students out of this process?"

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**SHORT version**




**Tools and supports rated helpful or very helpful by 90% of teachers:**

- Assessments aligned to standards that indicate mastery of concepts (93%)
- Tools to track individual student progress on key standards (92%)
- Strategies and coaching to teach content more deeply (93%)

Source: MetLife (2013). *The MetLife survey of the American teacher: Challenges for school leadership*. Accessed at <https://www.metlife.com/assets/cao/foundation/MetLife-Teacher-Survey-2012.pdf> on April 8, 2013.

PERFORMANCE MANAGEMENT Advantage Evaluation & Professional Growth <small>at American Institutes for Research</small>		 <small>AMERICAN INSTITUTES FOR RESEARCH</small>	
Score	Criteria	Description (not exhaustive)	
4	Student growth for SLO(s) has exceeded the goal(s).  Educator engaged in a comprehensive, data-driven SLO process that resulted in exceptional student growth.	Evidence indicates the targeted population's growth exceeded the expectations described in the goal.  Educator set rigorous superior goal(s); skillfully used appropriate assessments; continuously monitored progress; strategically revised instruction based on progress monitoring data.	
3	Student growth for SLO(s) has met goal(s).  Educator engaged in a data-driven SLO process that resulted in student growth.	Evidence indicates the targeted population met the expectations described in the goal.  Educator set attainable goal(s); used appropriate assessments; monitored progress; adjusted instruction based on progress monitoring data.	
2	Student growth for SLO(s) has partially	Evidence indicates the targeted population partially met	

Center on GREAT TEACHERS & LEADERS  
at American Institutes for Research



**VCS**  
Vicksburg Community Schools  
*Traditions In Excellence*

The steering committee shifted its perspective. As state law requires we must measure student growth and assessment data, and federal law requires program evaluation, and MDE states we must measure student impact and teacher implementation, we determined to assess the fidelity of implementation of the SLO process in order to meet the additional 20%. Rubrics were developed for both the student growth/impact and process components. The implementation process was divided into four categories worth 5% each:

- Dialogue through the PLC and SLO process with peers and administration.
- What do we expect students to learn?
- How do we know students have learned the essential content?
- How do we respond when students learn or don't learn the essential content?

Rubric language was closely tied to the Danielson language in our evaluation model, and DuFour and Marzano statements tied to our PLC and standards development processes. Lists of evidence already available are being collected which could be used to document the process were also developed.

## Vicksburg Community Schools: Student Impact & Teacher Fidelity

### Student Growth and Assessment Data Rubric – DRAFT

	Unsatisfactory	BASIC	Proficient	Dis
<b>What do we expect students to learn?</b>  <i>Educators set rigorous &amp; attainable goals based on student</i>	The teacher may not identify all priority standards within each unit as involving important information to which students should pay particular attention. The teacher may not provide a clearly stated learning	The teacher identifies (the priority standards within each unit) as involving important information to which students should pay particular attention. The teacher provides a clearly stated learning goal(s) accompanied by scale(s) or rubric(s) that describes levels of	The teacher identifies (and clearly articulates the priority standards within each unit) as involving important information to which students should pay particular attention. (Marzano 1.6) The teacher provides a clearly stated learning goal(s) accompanied by scale(s) or rubric(s) that describes levels of performance relative to the (priority)	The teacher identifies (and clearly articulates the priority standards within each unit) as involving important information to which students should pay particular attention. (Marzano 1.6) The teacher provides a clearly stated learning goal(s) accompanied by scale(s) or rubric(s) that describes levels of performance relative to the (priority)
	<b>Unsatisfactory</b>	<b>Basic</b>	<b>Proficient</b>	
<b>Dialogue through the PLC and SLO process across grade level or department</b>	Teacher rarely or never collaborates with peers or engages in reflective inquiry for the purpose of improving instructional practice or student learning.  NOTE: All rubric language comes from the 5D Observation (PCC1 - Professional Learning and	Teacher collaborates and engages in reflective inquiry with peers and administrators for the purpose of improving instructional practice and student learning. Teacher provides minimal contributions.	Teacher collaborates and engages in reflective inquiry with peers and administrators for the purpose of improving instructional practice and student learning. Teacher contributes to collaborative work.	Teacher rarely or never collaborates with peers or engages in reflective inquiry for the purpose of improving instructional practice or student learning.

## Preponderance of Evidence

*A standard of proof that must be met by a plaintiff if he or she is to win a civil action.*

<http://legal-dictionary.thefreedictionary.com/Preponderance+of+Evidence>

- ▶ In a civil case, the plaintiff has the burden of proving the facts and claims asserted.
- ▶ The amount of evidence required varies from claim to claim.
- ▶ There are three different evidentiary standards:
  1. Preponderance of Evidence
  2. Clear and Convincing Evidence
  3. Proof Beyond a Reasonable Doubt

## Preponderance of Evidence

*A standard of proof that must be met by a plaintiff if he or she is to win a civil action.*

<http://legal-dictionary.thefreedictionary.com/Preponderance+of+Evidence>

- ▶ The majority of civil claims are subjected to a preponderance of evidence standard.
- ▶ The quantum of evidence that constitutes a preponderance cannot be reduced to a simple formula (as prevalent with VAM).
- ▶ A preponderance of evidence has been described as just enough evidence to make it more likely than not that the claim is true.

The screenshot shows the MIEM Institute website with a navigation menu (HOME, EVENT DETAILS, REGISTRATION, RESOURCES, MIEM HOME PAGE) and a 'Presentations' section. The presentations listed include '4/28/16 Pre-Conference' with items like '5 Dimensions of Teaching and Learning' and '4/29/16 Main Conference' with 'General Session'. Below the website is a slide with a dark red background and white text.

**MASA/MASP  
EDUCATOR EVALUATIONS**

**PA 173 – LAW OF THE LAND  
Part I: Focus on Teacher Evaluations  
April 29, 2016**

**By Barbara A. Ruga**

**CLARK HILL  
PC  
ATTORNEYS AT LAW**

NOTE: Link to Barb's resources embedded on this slide, just click the pictures. Also, seen at the top.

The slide has a dark red header with the title 'FINAL YEAR END EVALUATION'. Below the header is a list of bullet points. To the right of the list is a graphic of an evaluation checklist with a red checkmark next to 'OUTSTANDING'.

**FINAL YEAR END EVALUATION**

46

- **Must rate IDP goals**
  - Achieved
  - Partially achieved
  - Not met
- **Consider all relevant information**
  - Observations, formal and informal
  - Walkthroughs
  - **Student growth**
  - Anecdotal incidents brought to teacher's attention in some fashion
  - Parent input
  - Student input
  - Artifacts
  - Section 1248 criteria
- **Rating should align with evaluator's opinion**

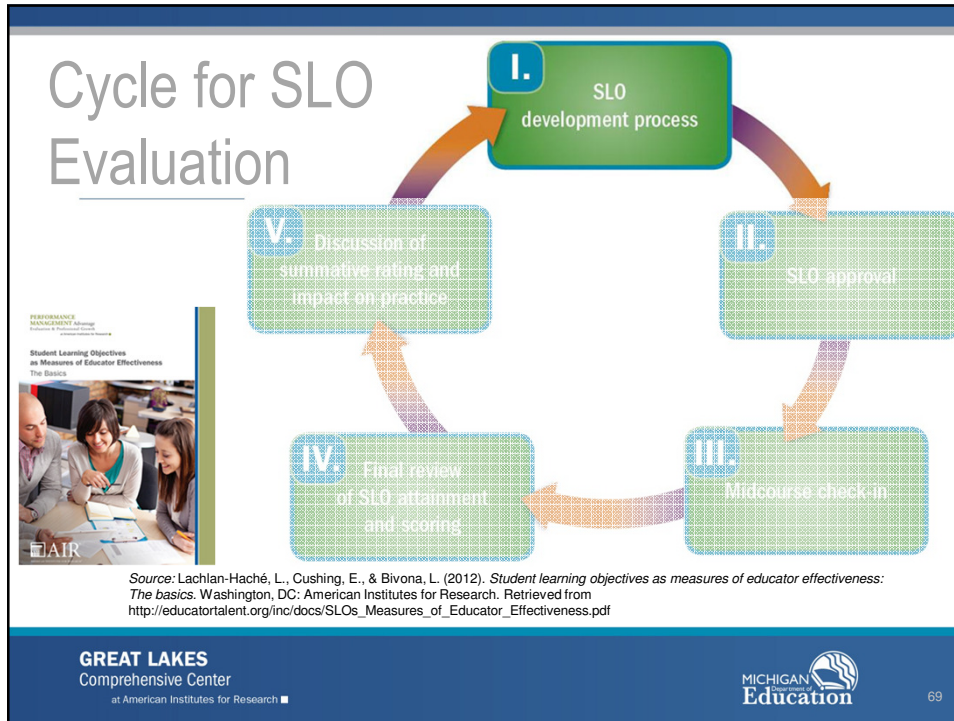
**Evaluation**

- OUTSTANDING**
- Excellent
- Very Good
- Average
- Below Average

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## MDE Recommendation: Who Will Write SLOs?

**MDE will:**

- Recommend that teachers, principals, and other certified staff members write or *have input into the writing of SLOs* in accordance with state law requiring the use of student growth measures in educator evaluations.

**GREAT LAKES**  
 Comprehensive Center  
 at American Institutes for Research

MICHIGAN  
 Department of  
**Education**

70

## Michigan Department of Education Student Learning Objectives (SLO) Template

## Michigan Department of Education Student Learning Objective (SLO) Template Checklist

It is recommended that this checklist be used for both developing and approving SLOs. For an SLO to be approved, all criteria should be met as noted by a check mark in each box by an SLO evaluator.

Name of Teacher/Teacher Team: _____		Date of Review: _____
Content Area: _____		Grade: _____
Type of SLO: <input type="checkbox"/> Class-Level <input type="checkbox"/> Course-Level <input type="checkbox"/> Targeted <input type="checkbox"/> Tiered		
Indicator Met	<b>INTERVAL OF INSTRUCTION</b>	<i>What is the time period that instruction will occur?</i>
<input type="checkbox"/>	Specifies start and stop dates which includes the majority of the course length.	Comments: _____
Indicator Met	<b>STUDENT POPULATION</b>	<i>Who is included in this objective? Why is this the target group selected?</i>
<input type="checkbox"/>	Justifies why this class and/or targeted group was selected.	Comments: _____
<input type="checkbox"/>	Describes the characteristics of the student population including the numbers of students with special needs relevant to the SLO (e.g., I have 4 students with reading disabilities, 2 English language learners...).	Comments: _____
<input type="checkbox"/>	If subgroups are excluded, explains which students are excluded, why they are excluded, and if they are covered in another SLO.	Comments: _____
Indicator Met	<b>LEARNING STANDARDS</b>	<i>What are the key standards connected to the learning content?</i>

## Michigan Department of Education Student Learning Objectives (SLO) Template

Type of SLO:  Class-level  Course-level  Targeted  Tiered

### Blank Template for SLO (Student Learning Objective)

Name(s): \_\_\_\_\_ Content Area: \_\_\_\_\_ Grade Level: \_\_\_\_\_

Instruction Interval: \_\_\_\_\_ SLO Type:  Class-level  Course-level or Grade-level  Targeted  Tiered

**Student Population**

Who is included in this objective? If a targeted subgroup, how will the other students be addressed in another SLO? [Support Video #1 OH](#)

MDE Checklist Criteria for Student Population:

- ✓ Describes the demographics of the class accurately.
- ✓ Justifies why a targeted group was selected or includes the entire class.
  - If subgroups are excluded, specifies who and if they are covered by another SLO; otherwise, why not?

*NOTE: By writing your responses below each box, the boxes will adjust, the text will flow better from page to page, and the approval committee can add comments within this MS Word document which is otherwise not possible in a text box.*

Indicator Met	<b>LEARNING STANDARDS</b>	<i>What are the key standards connected to the learning content?</i>
---------------	---------------------------	--

# I. SLO Development from AIR "SLO ... Basics"

**I. SLO development process**

Though SLOs take on a variety of shapes and forms, the following five steps generally outline the first part of the SLO evaluation cycle, the SLO development process.

**STEP 1: Identify Core Concepts and Standards**

The development process begins with an educator or a team of educators identifying the main content and standards for their grade or subject. In this step, the educator articulates the major concepts or skills that students will gain during the course. The content and standards should represent the essential learning of the course, such as key skills or overarching content, and the specific national or state standard(s) that align with that content. Content should be broad enough to represent the most important learning in the course, but narrow enough to be measured through one or more summative assessments.

SLO development generally includes the following five steps:

1. Identify core content and standards
2. Gather and analyze student data
3. Determine the focus of the SLO
4. Select or develop an assessment
5. Develop a growth target and rationale

Source: Lachlan-Haché et al. (2012b).

**GREAT LAKES**  
Comprehensive Center  
at American Institutes for Research

73

## First things, first ... Samples?

### OAISD Sample Algebra 1 (MS or HS) Student Learning Objectives (SLO)

Name(s): Mr. Will Power (8<sup>th</sup> or 9<sup>th</sup> grade)      Content Area: Math      Grade/Course: Alg. 1

Instruction Interval: 9/30/2016 till 1/20/2017      SLO Type:  Class-level  Course-level or Grade-level  Targeted  Tiered

Grade 9-12 Introduction to Art

**Student Learning Objective (SLO) Template**

*This template should be completed while referring to the SLO Template Checklist.*

Teacher Name: \_\_\_\_\_ Content Area and Course(s): Introduction to Art Grade Level(s): 9-12 Academic Year: 2012-2013

Please use the guidance provided in addition to this template to develop components of the student learning objective and populate each component in the space below.

FIND samples on the [SI Timeline](#)

# Just the write size SLO?

**Standards and Content**

What content will the SLO target? To what related standards is the SLO aligned?



Based on the results of the pre-assessment, the learning content for this SLO focuses on the ODE Visual Art requirements for PERCEIVING/KNOWING (1PE, 2PE, 3PE, 4PE, 6PE), PRODUCING (1PR, 2PR, 3PR, 4PR, 6PR), and RESPONDING/REFLECTING (1RE, 2RE, 3RE). Some of the achievement content statements are at the beginning level, while others are at the intermediate and accelerated level. In order to show stretch, differentiated instruction will be offered for all major works of art. This SLO also focuses on our building goals for reading across the curriculum.

**Comments: Rationale for Growth Target(s)**

What is your rationale for setting the target(s) for student growth within the interval of instruction?

- Demonstrates teacher knowledge of students and content
- Explains why target is appropriate for the population
- Addresses observed student needs
- Uses data to identify student needs and determine appropriate growth targets
- Explains how targets align with broader school and district goals
- Sets rigorous expectations for students and teacher(s)

- 1<sup>st</sup>: Yes. Teacher states the course content focuses on the skills students need to be successful at the next level.
- 2<sup>nd</sup>: No. There is no explanation as to why the identified targets are appropriate for this group of students and/or this course.
- 3<sup>rd</sup>: No. Students' weaknesses are identified in other sections of the template. Consider including them again here and stating how the teacher is addressing them.

# Just the write size SLO?

**Learning Standards**

What are the essential standards connected to the learning content? [Links: Support Video #2 OH](#)

- Aligns to specific state-adopted standards
- Represents the essential standards or the big ideas to be taught during the interval of instruction
- Reaches the appropriate level of complexity (DOK) for each state-adopted standard measured

There are 17 "essential" standards for the first semester of Algebra 1 that should be mastered as foundational. The scope and sequence of the standards derive from the CCSS Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards. Of the 32 standards in units 1 and 2, an Ottawa Area ISD regional team of high school math teachers ranked 17 as "essential" based on readiness, leverage, endurance, teacher intuition and the expectation of appearing on state/national summative assessments. The essential standards include:

**Unit 1:**

- N.Q.2 (Define appropriate quantities for the purpose of descriptive modeling.)
- N.Q.3 (Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.)
- A.SSE.1 (Interpret expressions that represent a quantity in terms of its context.)
- A.CED.1 (Create equations and inequalities in one variable and use them to solve problems.)
- A.CED.2 (Create equations in two or more variables and graph them on coordinate axes with labels and scales.)
- A.CED.3 (Represent constraints by systems of equations or inequalities, and interpret solutions.)
- A.CED.4 (Rearrange formulas to highlight a quantity of interest.)
- A.REI.1 (Explain each step in solving a simple equation.)
- A.REI.3 (Solve linear equations and inequalities in one variable.)

**Unit 2:**

- A.REI.6 (Solve systems of linear equations)



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## Practical School Improvement Timeline for Michigan

Search this specific site

**Blank Sample Template for Student Learning Objectives (SLO)**

Instructional Level: \_\_\_\_\_ SLO Type:  Class-level  Course-level or Grade-level  Targeted  Tiered

**Student Population**  
Who is included in this objective? If a targeted subgroup, how will the other students be addressed in another SLO? [Instructional Support Video #1 OH](#)

Describe the characteristics of the student population including special needs (disabilities, language differences, etc.)

Describe why a targeted group was identified (include the criteria used)

If subgroups are included, specify whether and if they are covered by another SLO reference, why not

**Learning Standards**  
What are the essential standards connected to the learning content? [Support Video #2 OH](#)

Align to specific state adopted standards

Align to the content standard as they apply to the content (e.g., Ohio's Academic Content Standards for Mathematics)

Transfer the appropriate level of complexity (L.O.C.) to each state adopted standard

**Baseline Data**  
What data was reviewed in the development of the SLO? How do the data support the SLO? [Support Video #3 OH](#) [Data Snapshot OH](#)

Identify sources of information about students (e.g., third data and prior year test and/or pre-test data)

Document student data to demonstrate specific student needs for the content

### OAISD SLO Template

This blank template has podcasts linked to each section from Ohio's Teacher of the Year (2013), embedded scoring rubric and other linked resources to guide writing a Student Learning Objective. The OAISD simply combined the MDE Checklist and MDE Blank Template then enhanced the document with linked resources.

[BLANK SLO TEMPLATE](#)

**Who will be taught and what do they know?**

**What standards will be taught and how will they be measured?**

**What will they achieve & why?**

There are six components to a SLO and the template shows these with six text boxes to complete. These six components align to the 5 steps for developing a SLO by the American Institute of Research. The basic structure is simple, but that does not mean the process will be easy for teachers or administrators. This process will take time to master, consider a growth mindset as you slowly implement and support the develop of SLO(s).

1. Who will be taught? Describe the student population ... [read more \(box 1 & 3\)](#).
2. What standards will be taught? Identify the essential standards ... [read more \(box 2 & 4\)](#).
3. What do we know about the prior knowledge of the students? Baseline data ... [read more \(box 1 & 3\)](#).

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## Practical School Improvement Timeline for Michigan

Search this specific site

**Blank Sample Template for Student Learning Objectives (SLO)**

Instructional Level: \_\_\_\_\_ SLO Type:  Class-level  Course-level or Grade-level  Targeted  Tiered

**Student Population**  
Who is included in this objective? If a targeted subgroup, how will the other students be addressed in another SLO? [Instructional Support Video #1 OH](#)

Describe the characteristics of the student population including special needs (disabilities, language differences, etc.)

Describe why a targeted group was identified (include the criteria used)

If subgroups are included, specify whether and if they are covered by another SLO reference, why not

**Learning Standards**  
What are the essential standards connected to the learning content? [Support Video #2 OH](#)

Align to specific state adopted standards

Align to the content standard as they apply to the content (e.g., Ohio's Academic Content Standards for Mathematics)

Transfer the appropriate level of complexity (L.O.C.) to each state adopted standard

**Baseline Data**  
What data was reviewed in the development of the SLO? How do the data support the SLO? [Support Video #3 OH](#) [Data Snapshot OH](#)


Identify sources of information about students (e.g., third data and prior year test and/or pre-test data)

Document student data to demonstrate specific student needs for the content

### Box 1 & 3: Who are your students and What do they know?

Regardless if the students are elementary or secondary, a Student Learning Objective may be written for EVERY CONTENT area, from Art to  $X + Y = Z$ . The first box asks you to describe the students who will be taught and the third box to describe what we know about them in relation to the content to be taught (this may take the form of previous content taught a year earlier).

**MI Box 1 Student Population:**  
Given the [Blank SLO Template](#), describe the student population as seen in the [Sample 5th grade Math SLO](#).



**Student Population**  
Who is included in this objective? If a targeted subgroup, how will the other students be addressed in another SLO? [Instructional Support Video #1 OH](#)

There are 30 students enrolled in the class, 25 students completed the Delta Math 5<sup>th</sup> grade readiness screener last spring for baseline data and all 30 completed the screener in the beginning of the fall semester. There are 18 boys and 12 girls. Seven of the students have IEPs, though only two need math related accommodations (*NOTE: may wish to note the accommodations for SWD and EL*). There are also three students who qualify as an English Learner. This SLO will set goals for all 30 students based on available baseline data and will set rigorous and attainable goals for each student or group of students as determined by baseline data.

## Baseline data samples...

There exists a great deal of inconsistency with baseline data for these 90 students. Virtually all of the students have M-STEP data from the previous year. Some have Delta Math Algebra Readiness data from last spring. We have a few who we do not have data and we are in the process of discussing the creation of a screener or using Delta Math Algebra 1 Readiness Screener for new students or all students in the fall. Based on the potential of three data points (M-STEP, Delta Math and teacher rating from last year based on unit assessments), students fall into one of four categories:

Group Name	Advanced	Benchmark	Strategic/"At Risk"	Intensive
Criteria	<p><b>Must have 2 of 3:</b></p> <ul style="list-style-type: none"> <li>Advanced on prior year M-STEP</li> <li>Advanced prior teacher rating</li> <li>Met benchmark criteria on all six Delta Math Algebra 1 Readiness Standards</li> </ul>	<p><b>Must have 2 of 3:</b></p> <ul style="list-style-type: none"> <li>Proficient or higher on prior M-STEP</li> <li>Proficient or higher on prior teacher rating</li> <li>Met benchmark criteria on at least 5 of the Delta Math Algebra 1 Readiness Standards</li> </ul>	<p><b>Contextual based on two or three factors:</b></p> <ul style="list-style-type: none"> <li>Minimally Proficient or Proficient on prior M-STEP</li> <li>Not Advanced on prior teacher rating</li> <li>Met benchmark criteria on at least 4 of the Delta Math Algebra 1 Readiness Standards</li> </ul>	<p><b>Contextual based on two or three factors:</b></p> <ul style="list-style-type: none"> <li>Minimally Proficient or Not Proficient on prior M-STEP</li> <li>Strategic or Intensive on prior teacher rating</li> <li>Met benchmark criteria on 3 or fewer of the Delta Math Algebra 1 Readiness Standards</li> </ul>
Number of Students	7	24	47*	12

\* Three students did not have data from the previous year, the decision was made to give them the Delta Math Readiness Screener this year, which placed all three students in the Strategic category.

The difference between Strategic and Intensive may be contextual based on the data. For instance, the student may have been minimally proficient and met benchmark on at least four Delta Math Algebra 1 Readiness, however, the

## Baseline data samples...



### Baseline and Trend Data

What information is being used to inform the creation of the SLO and establish the amount of growth that should take place?

Since trend and prior test scores are not available a two-part, district-created pre-assessment was created and administered. Part one of the assessment was comprised of 25 multiple choice questions, one written extended response and one extended performance response. The multiple choice scores ranged from 8 to 17. Results indicate that most students demonstrated a basic knowledge of the elements of art and art history, but lack in-depth understanding of both. The written extended response results showed difficulty interpreting art work, recognizing how the elements of art are utilized in a work of art and correct use of art terms and vocabulary: 25% scored 1, 30% scored 2, 25% scored 3, 20% scored 4. Part two was the performance task where most students were able to complete the task successfully, but the level of achievement varied greatly in the areas of technical skill and direct observation: 20% scored 1, 35% scored 2, 30% scored 3, 15% scored 4.

### Comments: Growth Target(s)

Considering all available data and content requirements, what growth target(s) can students be expected to reach?

- All students in the class have a growth target in at least one SLO
- Uses baseline or pretest data to determine appropriate growth
- Sets developmentally appropriate targets
- Creates tiered targets when appropriate so that all students may demonstrate growth
- Sets ambitious yet attainable targets

1<sup>st</sup>: Yes. Each student seems to have the same growth target.

2<sup>nd</sup>: No. The teacher included data in the first section, but does not reference it here. Consider including the data again to demonstrate targets are appropriate.

3<sup>rd</sup>: No. If data were included, the evaluator(s) could better determine whether or not the established targets are appropriate.

4<sup>th</sup>: No. Tiered targets would likely ensure you have developmentally appropriate targets that ensure adequate growth for both your low and high-achieving students.

5<sup>th</sup>: No. Because the data is not referenced and because the "one target fits all approach" does not seem appropriate for the lowest and highest achieving. Therefore, we cannot state the targets provided are ambitious and yet attainable.

**Box 4 Assessment (Step 4 AIR):** The support video from Ohio includes a reference to an assessment checklist. The **SLO Assessment Checklist** from Indiana is one of the best one page overviews for SLO usage.

**SLO Assessment OHTY**

- Two other considerations are as follows:
  - To increase comparability across SLOs, consider using the same assessment as your colleagues who measure the following criteria:
    - Teach the same course or subject.
    - Share your team SLO.
  - Make sure the time required to administer and score the assessment is reasonable.

Criterion	Considerations (Check all that apply.)
<b>Alignment and Stretch</b>	<input type="checkbox"/> Items/tasks cover key subject/grade-level content standards. <input type="checkbox"/> Where applicable, items/tasks cover knowledge and skills that will be of value beyond the year – either in the next level of the subject, in other academic disciplines, or in careers/life. <input type="checkbox"/> Where applicable, there are low- and high-end stretch items that cover pre-requisite objectives from prior years and objectives from the next year/course. <input type="checkbox"/> More complex and more important items/tasks have more weight (count more). Evidence/Feedback:
<b>Rigor and Complexity</b>	<input type="checkbox"/> Overall, the items, tasks, rubrics are appropriately challenging for the grade-level/course (e.g., at right level of DOK and correct reading level). <input type="checkbox"/> Many items/tasks require critical thinking and application. <input type="checkbox"/> Multiple-choice questions are appropriately rigorous or complex (e.g. multistep). <input type="checkbox"/> Key content standards are assessed at greater depths of understanding and/or complexity. Evidence/Feedback:
<b>Format, Construct, Task, Mastery</b>	<input type="checkbox"/> Items/tasks are written clearly. <input type="checkbox"/> The assessments/tasks are free from bias; no wording or knowledge that is accessible to only specific ethnicities, subcultures, or genders. <input type="checkbox"/> Some standards are assessed across multiple items/tasks. <input type="checkbox"/> Item types and length of the assessment are appropriate for the subject/grade level. <input type="checkbox"/> Tasks and open-ended questions have rubrics that (1) articulate what students are expected to know and do and (2) differentiate between levels of knowledge/mastery. Evidence/Feedback:

Type 1 Set by teacher or teacher team using available assessments  
Type 2 Set by teacher or teacher team using assessment list or ranking  
Type 3 Set by teacher or teacher team using common assessments  
Type 4 Set by local education agency using common assessments and common growth targets

Increasing Teacher Agency ←      → Increasing SLO Comparability

## MDE Recommendation: SLO Assessment Approaches

**MDE will:**

- Share the spectrum with local districts.
- Recommend a Type 3 approach to SLOs.

Type 1 Set by teacher or teacher team using available assessments  
Type 2 Set by teacher or teacher team using assessment list or ranking  
Type 3 Set by teacher or teacher team using common assessments  
Type 4 Set by local education agency using common assessments and common growth targets

Increasing Teacher Agency ←      → Increasing SLO Comparability

82



# I. SLO Development from AIR "SLO ... Basics"



## STEP 4: Select or Develop an Assessment

SLO development generally includes the following five steps:

1. Identify core content and standards
2. Gather and analyze student data
3. Determine the focus of the SLO
4. Select or develop an assessment
5. Develop a growth target and rationale

Assessments are necessary to determine which students indicate which areas of student learning need attention. Formative assessments make midcourse

adjustments based on guidance from formative assessment data.

When multiple educators adopt the same assessment measure(s) to ensure consistency and under the same testing conditions. Schools and districts recommend team-developed assessments rather than those developed by an individual teacher.

### A CRITICAL NOTE:

SLOs are only as good as the baseline, trend, and assessment data upon which they are built. If these forms of data are invalid or unreliable, the growth target and SLO will be compromised.



## Defend the assessment!

### Assessment

How will you measure the outcomes of this SLO, which tool(s) will be reviewed to determine success criteria?

[Support Video #4 OH:](#) [SLO Assessment Checklist from IN](#)

The Ottawa Area ISD has developed unit interim assessments to measure student proficiency by setting a specific success criteria for each essential standard. Each essential standard is measured using 3 to 5 questions that vary in Depth of Knowledge and provide sufficient evidence of success. All students will be given the OAISD Algebra 1 - Unit 1 interim assessment in October and the Unit 2 interim assessment in December. Students who do not demonstrate proficiency for any essential standard will be provided re-teaching opportunities and then assessed again before the end of the semester using any other assessment tool that aligns with the standard and has sufficient evidence. The OAISD has developed "spiral" tests and provides limited banks of items for this specific purpose.

- ✓ Describes assessment alignment to the course content and emphasizes constructed-response or performance tasks that require higher-order thinking skills OR. Identifies national, state or regional assessments that have been reviewed by content experts to effectively measure course content and reliably measure student learning as intended.
- ✓ Indicates that there are clear answer key, scoring guides and/or rubrics for all assessment items, including formative assessments.
- ✓ Describes the use of formative assessments aligned to essential standards and how progress monitoring will occur.

### Assessment(s)

What assessment(s) will be used to measure student growth for this SLO?


The assessment used to measure student growth is a two-part, district-created, end-of-course exam that matches the rigor and content of the Introduction to Art class and the ODE Visual Arts Standards. Part one consists of 25 multiple choice questions that focus on the elements of art, art history and has one written extended response that shows the ability to analyze and interpret art work while knowledgeably using art vocabulary. Part two is an extended performance task (drawing) that demonstrates technical skill and the key aspects of direct observation. An answer key will be used to score the multiple choice questions and a rubric will be used for scoring the extended response questions. Scores will be averaged together in order to get a final score.

Per their IEP's, the sixteen students with disabilities will receive extended time for the assessments. Four students will have fewer test items and will work with a scribe if one is available to answer the extended written response question. If a scribe is not available, students will respond orally to the question.





Growth targets should be considered estimates and handled with a degree of caution during the early years of implementation. Educators may set targets that are too ambitious (and unachievable) or too low (and insufficiently challenging for teachers and students), resulting in misleading evaluation results. To support educators and their evaluators in building their skill in setting and judging growth targets, states and districts can provide explicit guidance and training. Training should include how to identify student trends through data analysis, how to set appropriate growth expectations based on data, and how to identify appropriate formative and summative assessments and their limitations.



### What student outcomes do we expect by the end of the course and why? (Box 5 & 6)

The following guidance parallels the support of the [Blank SLO Template \(Word\)](#) or [\(PDF\)](#) with some additional guidance on this page of the SI Timeline, pictured below is a sample of Box 2 from the 5th Grade Math [OAISD Sample SLO](#).

**Box 5 Growth Target (Step 5 AIR):** Until educators are proficient at writing, reviewing and/or approving growth targets as both rigorous and attainable, it is advisable to look at a variety of examples: In addition to the [OAISD Sample](#), you will find various states such as [Rhode Island](#) (teachers, admin and support SLOs), [Louisiana](#) (SLTs), [Ohio](#) (core and non-core) and [New York](#) (3 years of SLOs) have excellent sample SLOs.

According to the AIR SLO Basics publication: "the educator writes specific growth targets for students that align with state or national standards, district priorities, and course objectives. The target can be tiered for students in the classroom to allow all students to demonstrate growth or it can apply to all students in a class, grade, or subject. American Institute of Research also provides the caution found on the left.

SLO development generally includes the following five steps:

1. Identify core content and standards
2. Gather and analyze student data
3. Determine the focus of the SLO
4. Select or develop an assessment
5. Develop a growth target and rationale





**It is time for us, as a profession, to become wise**

Richard DuFour
3:30