

The Implementation of Student Learning Objectives

Recommendations for Decision Makers

Michigan Department of Education
Office of Education Improvement and Innovation



608 W. Allegan Street | P.O. Box 30008 | Lansing, MI 48909
www.michigan.gov/mde

GREAT LAKES
Comprehensive Center

at American Institutes for Research ■

1120 East Diehl Road | Suite 200 | Naperville, IL 60563
www.greatlakes-cc.org

The Implementation of Student Learning Objectives Recommendations for Decision Makers

**Michigan Department of Education
Office of Education Improvement and Innovation**

October 2016



Michigan Department of Education
608 W. Allegan Street
P.O. Box 30008
Lansing, MI 48909
<http://www.michigan.gov/mde>

Michigan State Board of Education

John C. Austin
President
Ann Arbor

Cassandra E. Ulbrich
Vice President
Rochester Hills

Michelle Fecteau
Secretary
Detroit

Pamela Pugh
Treasurer
Saginaw

Lupe Ramos-Montigny
NASBE Delegate
Grand Rapids

Kathleen N. Straus
Detroit

Eileen Weiser
Ann Arbor

Richard Zeile
Detroit

Governor Rick Snyder
Ex Officio

Brian J. Whiston
Chairman
Ex Officio
State Superintendent



Acknowledgements

The Michigan Department of Education and the Office of Education Improvement and Innovation would like to thank and acknowledge individuals who assisted in the collaborative development of this implementation manual.

Under the Supervision of:

Linda Forward, Director
Office of Education Improvement & Innovation

Great Lakes Comprehensive Center

Guidance Development:

Andrea Guiden, M.S., Senior Researcher
Bersheril Bailey, M.A., Senior Technical Assistance Consultant
Doug Fireside, M.S., Senior Technical Assistance Consultant

Michigan Department of Education Office of Education Improvement & Innovation

Project Support:

Stephen Best, Assistant Director
Sam Sinicropi, Consultant
Connie McCall, M.A., Department Analyst
Victor Bugni, Formative Assessment Consultant

Office of Educator Talent Project Support:

Jared Robinson, Ph.D., Assistant Director
Brian Lloyd, M.A., Ed.S., Student Growth Consultant

Michigan Department of Education

Review Committee:

(Alphabetical order)

Gregg Dionne, Ph.D., Supervisor
Office of Education Improvement & Innovation

Ruth Anne Hodges, Manager
Office of Education Improvement & Innovation

Dianne Joslin-Gould, Consultant
Office of Education Improvement & Innovation

Shereen Tabrizi, Ph.D., Manager
Office of Field Services

Joanne Winkelman, Consultant
Office of Special Education

Mike Radke, Ph.D., Director
Office of Field Services

External Review Committee:

Doug Greer, Director
Ottawa Area Intermediate School District

Dear Educator:

The Michigan Department of Education (MDE) is making innovative advances in education policy, most recently with a focus on student learning, accountability, and professional development. The MDE is committed to enhancing the quality of all schools and seeks to provide educators with a rigorous, fair, transparent, and supportive teacher evaluation system that is adaptable to the unique contexts of Michigan's school districts and intermediate school districts. The educator effectiveness system builds on the cycle of assessment and feedback as influential tools to encourage improved practice that leads to greater student growth. To that end, it is the hope of the MDE that local education agencies will use the information found in this guide as a model as they design or revise their local teacher evaluation systems, practices, and policies.

This handbook was developed with intensive input from multiple offices within the MDE as well as teachers, teacher leaders, and administrators from local districts and intermediate school districts to ensure that the information, practices, and recommendations contained herein are compatible with the needs of teachers, administrators, and students in Michigan. We also considered the insights, experiences, and resources of professional organizations and multiple states who have reported success and continuous improvement in the implementation of student learning objectives (SLOs).

Written with district decision makers in mind, this document outlines essential information for those who have an interest in using SLOs to chart and promote instructor effectiveness and to supply useful information for districts who might be interested in using SLOs as a system wide, local student growth measure. The purpose of the document is to outline the recommendations for using SLOs in the teacher evaluation and effectiveness process in Michigan. The guidebook specifically highlights district decision points to facilitate district decision making. Prior to or during the decision-making process, districts are encouraged to contact the MDE for answers to specific questions about SLO implementation as well as training resources that may be available.

Ultimately, the most significant benefit of using SLOs is to support student growth while improving instruction. SLOs, combined with other evidence about classroom instruction and student achievement, can inform Michigan's efforts to create a culture of learning and high expectations so that every student will graduate from high school prepared for careers, college, and community.

Finally, the MDE would like to thank Andrea Guiden and staff members of the Great Lakes Comprehensive Center at American Institutes for Research for their expertise and assistance in the development of this guidance document.

Regards,



Norma Jean Sass
Deputy Superintendent of Education Services

Contents

Page

Letter From Deputy Superintendent of Education Services

An Overview of Educator Evaluation Policies in Michigan.....	1
An Overview of Student Learning Objectives.....	2
Decision-Making: Setting SLO Policy.....	4
Decision Point 1. Determine District Decision-Making Stakeholders	4
Decision Point 2. Develop a Communications and Monitoring Plan	5
Decision Point 3. Create an Assessment List.....	7
Decision Point 4. Select an Approach to SLO Development and Implementation	8
Decision Point 5. Determine the Phases of the SLO Evaluation Cycle.....	9
Decision Point 6. Choose the Range of SLOs	17
Decision Point 7. Determine the SLO Accountability Policy.....	19
Decision Point 8. Develop the SLO Timeline	20
Decision Point 9. Create Guidelines for Establishing Building-Level SLO Teams	21
Decision Point 10. Support Teachers with Ongoing Professional Development	23
Decision Point 11. Develop a Data Management and Technical Support Plan.....	24
The Teacher Role: Writing an SLO	26
1. Confirm the Interval of Instruction	27
2. Gather and Review Available Data.....	27
3. Identify the Content and Standards Addressed by the SLO	28
4. Identify the Assessment and Create Growth Targets.....	28
5. Submit the SLO and Prepare for Review and Approval.....	29
6. Prepare for SLO Rating and Discussion	29
The Evaluator Role	30
Review and Approve the SLO	30
Prepare for SLO Rating and Discussion	30
SLO Implementation Challenges and Solutions	31
Summary of Recommendations.....	33
SLO Resources and Support.....	34
References	35

Appendices.....	36
Appendix A. MDE SLO Template	37
Appendix B. MDE SLO Template Checklist	40
Appendix C. Introduction to SLOs	42
Appendix D. Hierarchy of Assessments	45

An Overview of Educator Evaluation Policies in Michigan

The Michigan Department of Education (MDE) is committed to building an evaluation system that is transparent and fair for teachers and school administrators. It also aims to provide the tools, resources, and support that teachers and administrators need to ensure professional learning and development. Based on rigorous standards of professional practice and measurement, Michigan’s educator effectiveness system is designed to improve instruction, bolster the achievement of all students, and support professional learning.

Public Act 173 of 2015 states that the job performance of teachers and school administrators must use multiple rating categories that incorporate student growth data. For the 2016-2017 and 2017-2018 school years, 25% of the annual year-end evaluation shall be based on student growth and assessment data. Beginning with the 2018-2019 school year, 40% of the annual year-end evaluation shall be based on student growth and assessment data. Beginning with the 2018-2019 school year, for core content areas in grades and subjects in which state assessments are administered, 50% of student growth must be measured using the state assessments. Districts may choose to use state assessment data prior to 2018-19, but are not required to do so. The MDE began providing student growth percentiles (SGPs) as a state measure of student growth starting with the 2015-16 state assessments.

Public Act 173 of 2015 states that student growth data must be a “significant factor” in teacher and administrator evaluations.

The MDE supports the use of **student learning objectives** as an effective way to measure student growth while supporting teachers’ instructional development.

It is expected that student assessment and growth data not based on the state measure will be measured using multiple research-based growth measures or alternative assessments that are rigorous and comparable across schools within the school district or public school academy.

It is preferable that student growth measures be implemented with a degree of uniformity. However, the diverse needs of districts will require personalization in approach and design. The MDE’s ultimate goal is to support district decision makers in building policy that allows professionalism and integrity to guide the process of supporting teacher effectiveness and measuring student growth.

An Overview of Student Learning Objectives

A student learning objective (SLO) is a course-long academic goal that is set by a teacher or teacher team. The goal is based on the teacher's or teachers' knowledge of students and students' knowledge of content. SLO goals are: (1) designed to monitor a student's progress toward growth targets, (2) help to demonstrate a teacher's impact on student learning within a given interval of instruction, and (3) just one of the multiple measures of student growth that may account for a portion of a teacher's evaluation.

The SLO process describes the cycle of developing and obtaining approval for the SLO, teaching to and monitoring student progress toward the growth target, and reviewing summative data related to student performance. For a complete description of the SLO cycle, see the Decision Point 2 section of this document.

Although the term SLO may be new, many teachers already follow a process that mirrors the SLO process: Teachers regularly use data to assess where their students are prior to instruction, set academic goals, conduct a variety of formative assessments to track growth toward those goals, adjust instruction to support students in reaching their goals, and administer a summative assessment to measure how well students have done. SLOs serve as one way to formalize this set of good teaching practices. Early research on the SLO process shows promise in its impact on both teacher practice and student outcomes. In one study, as a result of the SLO goal-setting process, teachers reported that they were more focused on student achievement and data use and employed more evidence-based practices (Slotnik, Smith, & Liang, 2013). In two recent evaluations of SLO implementation, teachers reported that the SLO process provided them with the opportunity for data use, that the SLO process was an empowering aspect of their evaluations, and that they engaged in their evaluations more actively after SLO implementation (Donaldson, 2012; TNTP, 2012).

States and districts across the country decide to 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 30 states have policies or recommendations related to the use of SLOs in their evaluation systems (Lacireno-Paquet, Morgan, & Mello, 2014).

Some reasons that SLOs are used so widely across states relate to the following benefits they can offer. SLOs are:

- **Versatile.** SLOs can help measure student growth for all teachers, not just those teachers in state-tested grades and subjects. In addition, the SLO development and implementation process provides opportunities for teachers to collaborate and engage in professional conversations that are informed by data and focused on specific student outcomes.
- **Teacher Driven.** SLOs allow teachers to have a voice in many parts of the teacher evaluation process. Teachers also may use their professional knowledge of their students to set meaningful growth targets and help select which standards become the focus for the SLO. The SLO process also provides a direct connection between teacher SLOs and student learning, which helps to ensure that classroom instruction is student focused.

- **Adaptable.** SLOs can be flexible and adaptable. As schools implement new standards and curricula, SLOs still can be used to measure how well students are learning the new standards and the impact of the new curricula.

Teachers engaged in the SLO process can better formalize and account for their successes with students—all while using the information gathered through the process to improve their practice.

Education legislation in Michigan states that the student growth and assessment component of a teacher's evaluation may consist of the state student growth and assessment measurement standards and local student growth assessments. SLOs are one way to measure the academic growth of students at the local level. In addition, SLOs represent a formal process of helping teachers move toward instructional improvement by offering the chance to gather and analyze student data, work with colleagues, monitor student progress, and modify instruction accordingly.

Decision-Making: Setting SLO Policy

This section provides an overview of some of the most important decisions related to the implementation of SLOs. It is not intended to cover the entire scope of considerations for districts because each district operates in a unique context. Rather, the MDE provides recommendations to address the most critical questions about SLO implementation to help decision makers navigate the SLO policymaking process. Remember, districts and ISDs have the flexibility to shape the SLO process to fit local contexts.

Decision Point 1. Determine District Decision-Making Stakeholders

A critical first step in the SLO policymaking process is to select a team of district stakeholders who will be responsible for making SLO policy decisions, creating business rules to support SLO implementation, building and disseminating SLO communications, monitoring SLO implementation, and developing an SLO data management plan. A district SLO stakeholder team might include **one leader** from each of the following departments:

- Assessment
- Instructional Technical Support
- Educator Evaluation
- Professional Development
- Teachers Union
- School Improvement
- Human Resources
- Curriculum and Instruction

Building an innovative and reliable SLO implementation system requires a lot of time and energy. The use of SLOs may represent a shift in educator practice. To build a culture that supports SLO implementation, it is essential to develop educators' confidence in the process and create a coherent vision of the value of SLO implementation. Building a district team that has these priorities in mind will make the decision-making process a healthy one.

Case Study

In the Baltimore City Public School System, each school was asked to identify an “SLO Ambassador” who would receive advanced training and act as a school-based resource during the SLO development process. These SLO Ambassadors, serving in teacher-level positions, attended ongoing training and feedback sessions during the year and then were responsible for bringing the information back to their school site and providing the training to teachers and administrators at the school. SLO Ambassadors served as a resource for teachers and administrators as questions came up in the development, submission, and approval phases of the SLO process. They also acted as conduits of information back to the systems SLO workgroup, providing questions and concerns that needed to be addressed. As much as possible, the Ambassadors remained in place for multiple years during both the pilot year and the first year of district-wide rollout.

By identifying teacher-level staff who would be an integral part of the professional development and messaging process, the district knew it had a cadre of SLO champions who could help shape the message related to the SLO process.

Decision Point 2. Develop a Communications and Monitoring Plan

Communications with stakeholders about the goals for the SLO process as well as the expectations of teachers, school-based administrators, and central office staff is a vital step in ensuring that the SLO adoption and implementation process runs smoothly. Finding ways to share information at all steps of the process can increase buy-in from all stakeholders.

The SLO process is one that needs to be constantly reflected on and revised—how much guidance you provide on different steps in the process, which assessments to use, and which approach to use when setting growth targets are just a few of the parts of the process that require review and revision on a regular basis. Identifying how feedback information on the SLO process will be gathered, reviewed, and used to make adjustments year to year needs to be planned prior to implementation. Similarly, policies regarding the submission and review of the completed SLOs should be a part of the planning process.

A few readiness questions include the following:

- Are teachers able to receive e-mail alerts before the deadlines for SLO submission?
- What are the most effective ways that our district communicates with teachers about issues, policies, and news?
- Are teachers able to easily access student data systems and integrate them with the data-gathering requirements for both the creation of SLOs and the ongoing data collection points during the SLO implementation cycle?
- Do we have systems in place where school-based administrators could easily monitor the progress their teachers are making in the creation and submission of their SLOs against the district timelines?
- Are school-based administrators receiving regular reports that show which teachers are out of compliance with district timelines in other components of our teacher evaluation system? How might SLO compliance be integrated into that system?

Case Study

In the Baltimore City Public School System, each school was asked to identify an “SLO Ambassador” who would receive advanced training and act as a school-based resource during the SLO development process. These SLO Ambassadors, serving in teacher-level positions, attended ongoing training and feedback sessions during the year and then were responsible for bringing the information back to their school site and providing the training to teachers and administrators at the school. SLO Ambassadors served as a resource for teachers. Similar to other components of the educator evaluation process, the SLO process needs to include constant and ongoing training and refinement. In the Cleveland Metropolitan School District (CMSD), an internal student growth team meets regularly to discuss successes and challenges in their SLO implementation. This group has teacher union representation and district staff representation. The working group meets to discuss concerns about the assessments selected each year, refine the support documents, plan and develop ongoing teacher and administrator training, and review SLO audit reports and other data gathered about the SLO process.

Included in the data reviewed by the student growth team are yearly audits of SLOs and focus group and survey reports done by an external partner. These survey and focus group reports provide the basis for priority setting for ongoing professional development as well as gauge how impactful the SLO process is at changing teacher practice and student outcomes.

The student growth working group also makes recommendations to the larger teacher evaluation workgroup related to adjustments needed to the SLO process. In addition, this group serves as the primary communication source for news and policy changes related to the SLO process.

- Can central office personnel easily monitor the teacher-level, school-level, and district-wide compliance with timelines?

In addition, setting up an SLO “help desk” where teachers and administrators can quickly turn to for on-the-spot answers to questions, especially during the creation and submission time frame, can be helpful. After setting up such a help desk, districts need to consider how they are tracking the types of questions being asked as well as the answers and resources that are provided. This type of data tracking allows for revision of training and support materials for greater clarity.

Decision Point 3. Create an Assessment List

For districts that elect to apply an SLO approach that emphasizes comparability, decisions concerning assessment selection are critical. Identifying common assessments that can be used to measure growth will help in the comparability between SLOs at specific grade levels and subject areas. This will be a relatively simple process for subjects for which standards-aligned common assessments have been created and where those assessments lend themselves to measuring growth of students' mastery of standards over time. It will be more challenging, however, for subjects that do not currently have a common assessment or for subjects where the data linked to the common assessment are focused on proficiency rather than growth. As part of preparing to implement SLOs, it is vital to conduct a survey of what assessments are currently in use to determine if those assessments can meet the needs of the SLO process. Often, districts have created benchmark and end-of-course exams that teachers are using and with which they are familiar. If these align to the current standards and provide data that allow for measuring growth, not just proficiency, they might be good selections for use in the SLO process. With the current recommendations about reducing the testing burden on students, districts should resist the temptation to create new assessments for the purposes of implementing SLOs without finding currently used assessments that can be replaced by the newly adopted assessments.

District teams should take on the task of conducting a survey of currently used assessments in all grades and subjects. Often, district teams will find that schools have assessments that provide similar types of data or assessments that may no longer be aligned to current standards. In addition, an assessment review can help identify assessments that lend themselves to the type of growth measurement needed for use in SLOs.

Once the assessment review has been completed, district teams can develop a user-friendly document that lists the assessment that teachers of each subject and grade level in the district will use to measure student growth for their SLO. Districts should add further assessments only when absolutely necessary and, whenever possible, ensure that any additional assessments that are needed for the purposes of SLOs are added only when they replace existing assessments so that the total assessment burden is not increased.

The MDE has created an assessment hierarchy (see Appendix D) that can help guide district teams as they review which assessments fit the needs of SLOs. Any assessment used to measure growth for SLOs needs to be:

- Valid—measures what it purports to measure
- Reliable—returns consistent results
- Fair—is free of bias and accessible to the students being assessed
- Aligned—reflects the identified standards and provides the range of complexity outlined in those standards

It is important that district teams consider all of the different courses that are taught in the district to ensure that standards-aligned assessments are available for all teachers who are taking part in the SLO process. The close collaboration between assessment specialists and the SLO team is critical in ensuring that the assessments selected are valid and aligned, and the results lend themselves to the type of growth measures needed for SLOs.

Decision Point 4. Select an Approach to SLO Development and Implementation

There are four standard approaches to SLO development and implementation. One of the most significant variations in the SLO approach lies on the spectrum between decreasing and increasing SLO comparability. A decrease in SLO comparability refers to greater levels of autonomy that teachers have in creating SLOs, specifically in the assessment and growth target-setting process. An increase in SLO comparability refers to how similar SLOs are among teachers who teach the same subject and grade or across classrooms, schools, the district, or the state. Figure 1 illustrates a spectrum of approaches.

Figure 1. Increasing SLO Comparability

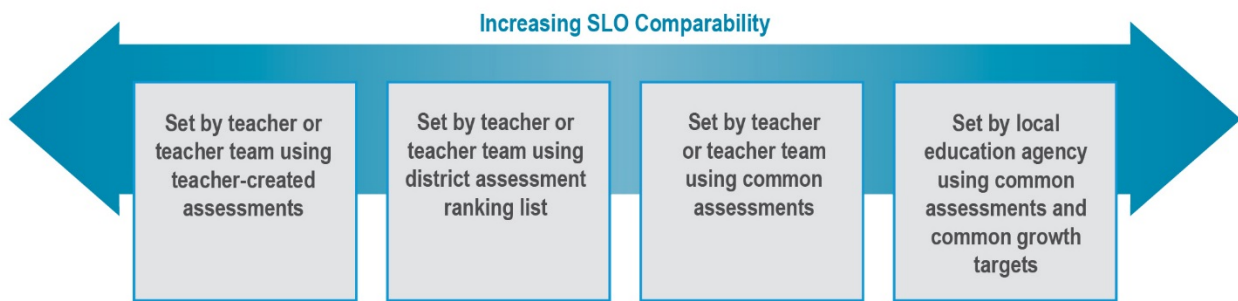


Figure adapted from *Student Learning Objectives: Early Lessons from the Teacher Incentive Fund*. (2013). By L. Lachlan-Haché, L. Matlach, K. Reese, E. Cushing, and M. Mean. Published by the Teacher Incentive Fund Technical Assistance Network.

At least in the first few years of SLO implementation, the MDE recommends that districts apply an approach that increases the greatest opportunities for SLO comparability so that teachers have a consistent approach to developing SLOs, setting growth targets, and using common student assessments and, in some cases, common growth target-setting approaches.

The MDE recommends that districts and ISDs use an approach that increases SLO comparability.

Decision Point 5. Determine the Phases of the SLO Evaluation Cycle

SLO Evaluation Cycle

The SLO cycle consists of five basic phases, as displayed in Figure 2, beginning with Gather and Study Student Data. You will recognize that it closely follows the Instructional Learning Cycle found in Figure 3.

Figure 2. SLO Cycle

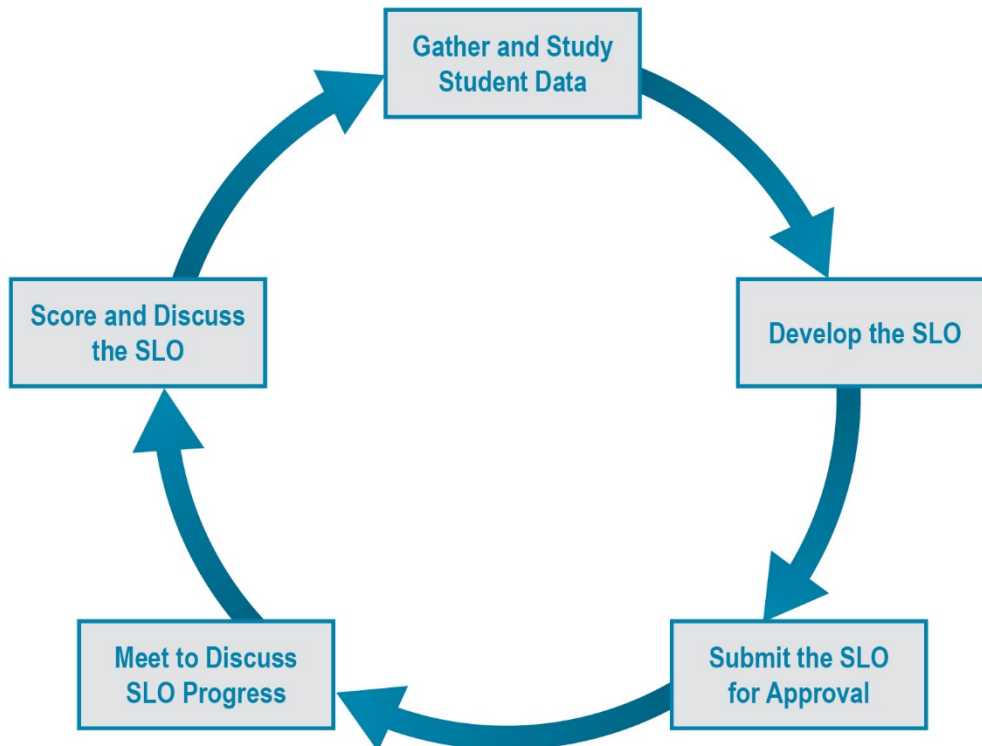
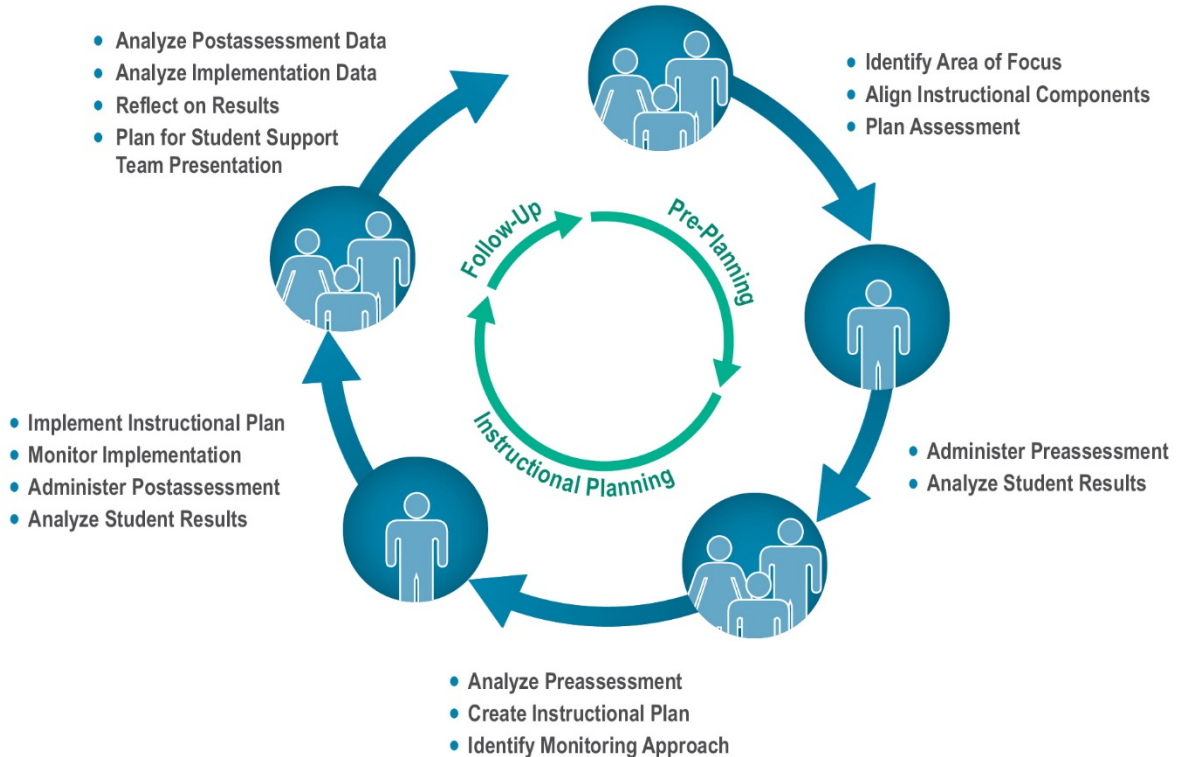


Figure adapted from *Student Learning Objectives as Measures of Educator Effectiveness: The Basics*. (2012). By L. Lachlan-Haché, E. Cushing, and L. Bivona. Published by American Institutes for Research.

Figure 3. Instructional Learning Cycle



Phase 1: Gather and Study Student Data

A high-quality SLO reflects how well a teacher understands the course content. It also reflects how well he or she understands his or her students—their learning needs, strengths, areas of weakness, and the contextual factors that may affect student growth. The first phase of the SLO process involves gathering multiple sources of data about student performance and developing a comprehensive picture of each student’s past and present academic performance. The data sources may include items such as pretests, state and district achievement tests, benchmark assessments, classroom performance records, and special education data as well as school and district academic goals. Districts and ISDs need to ensure that teachers have easy access to these types of data and that they have the training needed to accurately review and interpret the results.

For detailed information on school data analysis, please visit <http://www.advanced.org/sites/default/files/documents/state-resources/School%20Data%20Analysis%20Template%202015.docx>.

Phases 1 and 2 of the SLO cycle can be linked to the school improvement process of **Gather and Study**.

Phase 2: Develop the SLO

When writing the SLO, the teacher or teacher team outlines baseline and trend data related to student performance and describes the student population. The teacher or teacher teams then work to identify the specific set of standards that are going to be the focus for the SLO. In selecting specific standards, teachers should ensure that the selected assessment matches the standards and that the standards selected reflect a need as shown in the baseline and trend data. The teacher also develops appropriate student growth targets and records the rationale for them. The MDE has created a template and checklist that may be used to write the SLO. Appendices A and B include the MDE Student Learning Objective Template and Checklist. Districts may make changes to the template as needed.

The MDE SLO template consists of eight components as follows (Table 1 provides a description of each component):

- Interval of Instruction
- Type of SLO
- Student Population
- Learning Standards
- Baseline Data
- Assessment
- Growth Targets
- Rationale

Case Study

A fifth-grade math teacher, Ms. Jones, reviews the data from the past three years for fifth grade based on state assessment data. She discovers that although students generally perform well in math, there is a lag in performance when it comes to the domain for measurement and the domain for geometry. Based on these trend data, she decides that she is going to focus the work for her SLO in these two domains and assess all of the standards related to these domains to close this gap. She also gathers data from the fourth-grade math teachers who had her current fifth-grade students last year. Based on the final assessments given for the measurement and data units and the geometry unit, she can identify which fourth-grade students mastered the standards and which students still struggled with them. Combining these data with her own pre-assessment data, she feels that she has a good idea of where each of her students' performance levels are at the beginning of the year. She also can use these data to create tiers of her students so that she can set growth targets based on the pre-assessment data.

Table 1. SLO Components and Descriptions

SLO Component	Description	Guiding Questions for District Decision Makers
Interval of Instruction	Specifies SLO start and stop dates, which include the majority of the course length.	<ol style="list-style-type: none"> 1) How do the timelines for the SLO process align with the timelines for the other components of our teacher evaluation system? 2) How do the timelines for the SLO align with the timelines for assessments? 3) How are teachers of semester- and trimester-long classes impacted by the timelines? 4) What is the cutoff point for student enrollment in order to be included in a teacher’s roster for SLOs?
Type of SLO	Identifies whether the SLO includes the students in an entire course, one class, multiple classes, or simply a targeted group of students from various classes.	<ol style="list-style-type: none"> 1) What rules do we have about which students must be included in the SLO versus which students may be excluded from the SLO? 2) If teachers teach multiple sections of a single course, are they allowed to select only one of those sections or must they use all sections of the same course? 3) Will we allow teachers to select a target group of students to focus on for their SLO and what type of evidence will be acceptable to support the selection of that target group?
Student Population	Describes the academic characteristics of the students included the SLO. In some cases, the Student Population component may include contextual information about students.	<ol style="list-style-type: none"> 1) How easy is it for teachers to access the data they will need about students in their current classes? 2) What guidance and training are we providing for teachers in how to collect relevant information? 3) What guidance and training are we providing to ensure that information connected to the student population section relates directly to a student’s ability to achieve the growth targets set?
Learning Standards	Lists the essential learning standards connected to the learning content that is based on Michigan’s standards as adopted by the State Board of Education.	<ol style="list-style-type: none"> 1) What guidance is being provided on how many domains or standards should be included in the SLO? 2) Where state standards are not available for specific courses, have we identified other standards that teachers can reference, such as professional or national standards, and are there assessments that reflect those standards?
Baseline Data	Refers to all relevant student data. Summarizes student data. May include pretest data, benchmark data, achievement test data, classroom performance data, and so on.	<ol style="list-style-type: none"> 1) If we are providing policies that reflect more comparability between SLOs, have we identified assessment pairings that show growth between the pre- and post-assessment? 2) Do we have assessment pairs that demonstrate growth for all courses and content areas? 3) In which content areas and grade levels do we need to identify or create new assessments for either pre- and/or post-assessment data? 4) Have we provided training to teachers and administrators in assessment development and evaluation to ensure that all assessments are valid and reliable? 5) Do the assessments we recommend (or mandate) allow high-performing students to show academic stretch? 6) What guidance have we provided on additional baseline data that should be included in the SLO beyond the pre-assessment data?

SLO Component	Description	Guiding Questions for District Decision Makers
Assessment	Identifies assessments that have been reviewed to effectively measure course content and reliably measure student learning.	<ol style="list-style-type: none"> 1) What pre- and post-assessment pairs do we have for each grade level and subject area? 2) Do all assessment pairings provide growth data? 3) How well aligned are the assessments to current standards? 4) Do the data provided by the pre- and post-assessment allow for disaggregation by domain or standard, or do assessment results only provide an overall score? 5) Which content areas do we need to identify or create a new assessment pair for the SLO process? 6) What assessments are being recommended for special populations such as English language learner (ELL) and special education students? 7) Do the pre- and post-assessment reporting timelines match the SLO timeline for all courses?
Growth Targets	Lists differentiated (e.g., individualized, leveled) numerical growth targets based on available student data.	<ol style="list-style-type: none"> 1) What training have we developed and provided for teachers and administrators on how to set growth targets? 2) What specific requirements are in our policies for setting growth targets where no previous baseline data exist? 3) What guidance and training have we provided to teachers and administrators on how to provide targets that are appropriate for students scoring at the lowest and highest tiers on the pre-assessment? 4) Have we provided guidance and training on how to track student growth toward targets during the year and, if so, are midyear adjustments to growth targets allowed in our SLO model?
Rationale	Explains how targets are rigorous, attainable, and aligned with school and district goals.	<ol style="list-style-type: none"> 1) What guiding questions have we provided to teachers and administrators to ensure that the rationale section of the SLO reflects their professional thinking in the setting of growth targets? 2) What adjustments to defined growth targets are allowed in our SLO model? 3) Which student factors may be considered when making adjustments to growth targets? Which student factors cannot be considered? 4) Have we provided teachers and administrators with samples of high-quality rationales as models?

Phase 3: Submit the SLO for Approval

After the SLO is written, the teacher or teacher team should submit the SLO for approval. The MDE recommends that every SLO be reviewed and approved by a building-level SLO team, including the school administrator, to ensure alignment between the student growth targets and school and district goals. The SLO also might be aligned with the goals of the school improvement plan.

Phase 3 of the SLO cycle should be part of the school improvement process of **Plan and Do**.

Phase 4: Meet Midcourse to Discuss SLO Progress

The next phase of the SLO cycle includes a meeting between the teacher and the administrator to discuss student progress toward growth targets. In preparation for the meeting, teachers should review formative and interim student data to assess how students are progressing toward student growth targets. Teachers and administrators can use this time to discuss the data and any other issues that may influence the achievement of the student growth targets and to brainstorm about possible modifications in instructional strategies and other methods of student support.

A midcourse SLO check-in meeting can be scheduled to review progress on the SLO goals and to discuss any obstacles that teachers have encountered as they have worked at moving students toward their goals. Although not generally mandatory, some districts may include options for either the teacher or the evaluator to call for this midcourse meeting. For example if teachers have seen a large portion of their students already meeting their growth target part way through the SLO cycle, they might want to discuss making adjustments to their growth targets. Or teachers may have seen a high number of students either enter or leave the class they selected for their SLO. Regardless of the specifics, district teams should think through instances where teachers or evaluators might want to have a midcourse check-in meeting and which cases may qualify for a change from the original plans. Making major changes to the SLO at the midcourse check-in meeting is generally not seen as best practice, but there are instances where it may be necessary. If a substantial change is not needed, then the midcourse check-in may bring up topics that can be addressed in the following year's SLO work.

Phase 4 of the SLO cycle should be part of the school improvement process of **Do**.

Phase 5: Score and Discuss the SLO

When the summative assessment (the assessment used to determine if growth targets have been met) has been administered and scored, teachers report the number of students who met their growth targets. As part of the reflective practice in which teachers are engaged, they should reflect on both the results from the SLO—that is, how their students did compared with the initial growth target setting that was done—and the SLO process as a whole, with a specific focus on how the process impacted the experience that students had in the classroom. If, for example, fewer students met their target than expected, the teacher should be able to identify factors that they need to consider in the coming year that might have impacted the results. The teacher and administrator meet during the summative evaluation conference to determine the SLO rating and discuss implications for practice.

Although districts may create a rating system that meets their unique needs, Tables 2 and 3 provide sample rating systems that may be used by administrators during the final phase of the SLO cycle.

Phase 5 of the SLO cycle may be part of the school improvement process of **Do**.

Table 2. Sample A. SLO Rating System

Percentage of Students Meeting Growth Targets	Descriptive Rating	Numerical Rating
90–100	Exceeded	4
80–89	Met	3
70–79	Nearly Met	2
Below 70	Not Met	1

Table adapted from the Hawaii SLO Scoring Guide:

http://eesteacher.weebly.com/uploads/1/4/0/3/14039000/slo_teacher_template_2013-07-02.docx

Table 3. Sample B. SLO Rating System

Exceeded	This category applies when all or almost all students met the target(s) and many students exceeded the target(s). For example, exceeding the target(s) by a few points, a few percentage points, or a few students would not qualify an SLO for this category. This category should be selected only when a substantial number of students surpassed the overall level of attainment established by the target(s).
Met	This category applies when all or almost all students met the target(s). Results within a few points, a few percentage points, or a few students on either side of the target(s) should be considered “Met.” The bar for this category should be high, and it should only be selected when it is clear that the students met the overall level of attainment established by the target(s).
Nearly Met	This category applies when many students met the target(s), but the target(s) was missed by more than a few points, a few percentage points, or a few students. This category should be selected when it is clear that students fell short of the level of attainment established by the target(s).
Not Met	This category applies when the results do not fit the description of what it means to have “Nearly Met.” If a substantial proportion of students did not meet the target(s), the SLO was not met. This category also applies when results are missing, incomplete, or unreliable.

Table adapted from the Rhode Island SLO scoring guidance found at <http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Education-Eval-Main-Page/Measures-of-Student-Learning-GB-Edition-II.pdf>

At this point, the discussion might redirect teachers back to the school improvement process of Study and Do.

Decision Point 6. Choose the Range of SLOs

One major factor in SLO development is determining the range of the SLO. The term *range* refers to the students who will be covered by an SLO. Table 4 lists examples of SLO ranges, along with the benefits and drawbacks of each.

The MDE understands that the range of an SLO will depend on the subject taught and the number of students in the course.

Teachers with very few students may benefit from writing a combined SLO, which includes students in multiple grades and subjects. Teachers of one course with multiple classes may benefit from writing a course-level SLO so that it most accurately reflects the students in their caseload.

Table 4. Examples of Possible Range of an SLO

Option	Strengths	Challenges
Course-Level SLO	<ul style="list-style-type: none"> • Accounts for a large number of students taught by a teacher • Reduces the amount of impact an individual student may have on a teacher’s overall SLO results 	<ul style="list-style-type: none"> • May be difficult for teachers with small class sizes to implement
Class-Level SLO	<ul style="list-style-type: none"> • Reduces the amount of data a teacher with many students might need to gather and analyze 	<ul style="list-style-type: none"> • May not represent the majority of a teacher’s students • May prioritize one class over another
Multicourse SLO	<ul style="list-style-type: none"> • Allows teachers with a small number of students in different classes to combine their students into one SLO 	<ul style="list-style-type: none"> • Can be more complicated to implement because the students are dispersed throughout several classes and grade levels
Targeted SLO	<ul style="list-style-type: none"> • Encourages a focus on one group of (struggling) students 	<ul style="list-style-type: none"> • May not be representative of all of a teacher’s students • May increase the impact that an individual student has on a teacher’s SLO rating

Decision Point 7. Determine the SLO Accountability Policy

In Michigan, SLOs may be developed by individual teachers or teacher teams (e.g., grade-level teams, content-area teams). SLOs also can be based on either a shared accountability model or an individual accountability model. Please see Box 1 for a definition of each model. A district may determine which model works best for its context.

Box 1. SLO Options

- **SLOs with shared accountability:** All teachers share responsibility for the growth of the students included in the team SLO and therefore receive the same growth score for the growth of students included in the SLO. This approach highlights the collaboration and joint responsibility of teachers in student performance.
- **SLOs with individual accountability:** Each teacher is responsible for the growth of only the students that he or she teaches. As such, each teacher obtains a distinct growth score that is based on students' attainment of their growth targets.

Although the MDE recommends that the teachers work together to write SLOs in teacher teams (when that option is available) during at least the first year of SLO implementation, it also recommends that each teacher's final SLO score is reflective of the growth that the teacher's students made and that teachers do not share the data for the entire grade level. Working on the development of an SLO within a team may provide teachers the opportunity to build knowledge and capacity in developing an SLO. It also will allow teacher teams to analyze and discuss student data and to make collaborative decisions on student growth targets based on grade-level, school-level, or district-level goals and initiatives—ensuring that SLOs are aligned to the goals, measurable objectives, and strategies in the school improvement plan. Districts also should consider how best to support those teachers who lack the team structure.

The MDE recommends an *individual accountability approach* to SLO scoring. Although teachers may work together to draft or develop the SLO, each teacher may only be held accountable (in terms of the teacher's evaluation) for the growth of his or her own students. Again, SLOs are only one way of measuring student growth.

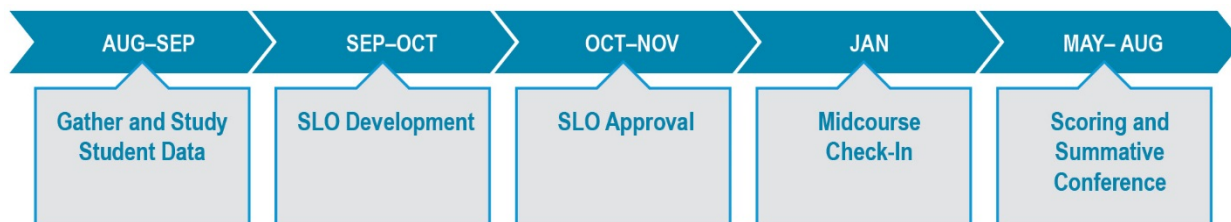
Decision Point 8. Develop the SLO Timeline

It would benefit local districts and ISDs to create an SLO timeline that aligns with most teachers' interval of instruction and other scheduled components of the teacher-evaluation process. In most cases, the interval of instruction will begin in the fall and end during the spring semester prior to the testing period. In other instances, the interval of instruction may last one full semester or trimester, in which case it might be useful for the district or ISD to develop a unique SLO timeline that meets the specific needs of teachers of semester courses. It would benefit local districts and ISDs to create multiple SLO timelines that take into account the different intervals of instruction that teachers have. At a minimum, timelines that reflect whole-year, semester-long, and trimester (if appropriate) classes should be created. These timelines should take into consideration the timelines of the other evaluation components as well as assessment schedules.

The MDE recommends that the SLO process cover the majority of a teacher's interval of instruction (from the beginning through the end of the course) in an effort to capture the breadth of the teacher's instruction. This approach also provides teachers the opportunity to cover as much of the course content as possible. For example, if a third-grade teacher writes an SLO, the interval of instruction would begin within the first month or two of school and end in the spring around the time of the spring testing cycle.

Figure 4 provides an example of a yearly SLO implementation timeline. Districts are strongly encouraged to set specific dates and deadlines for teachers. It depicts a timeline for yearlong courses. As stated previously, courses lasting only the length of one semester would require an abbreviated timeline.

Figure 4. Sample SLO Timeline



The MDE recommends that, whenever possible, the SLO process covers as much of a teacher's interval of instruction (from the beginning through the end of the course) as possible in an effort to capture the breadth of the teacher's instruction.

The MDE also recommends that the SLO timeline reflect the timelines of the other components of the teacher evaluation system and that it also integrates the schedule for assessments to ensure that assessment data are available for all students in the SLO cycle.

Decision Point 9. Create Guidelines for Establishing Building-Level SLO Teams

The MDE recognizes that most districts, school teams, and building-level teams are in charge of leading various efforts within their communities. Although schools may elect to use a team that already exists (e.g., the school improvement team) in order to reduce the burden on the number of individuals and resources required to implement the SLO training, review, and approval process, the MDE recommends a building-level SLO team consisting of the following members:

- The school principal and/or assistant principal
- A teacher representative from each grade level or content area
- A special education representative

This recommendation is designed to ensure that an expert from each academic group in the school community contributes his or her knowledge to the skilled and fair review of SLOs. It also ensures that the size of the SLO approval team is manageable. Figure 5 outlines the likely roles and responsibilities of those who will perform the five phases of the SLO cycle.

Figure 5. Roles and Responsibilities of Teachers and the Building-Level SLO Team

	TEACHERS	BUILDING-LEVEL SLO TEAM
Gather and Study Student Data	<ul style="list-style-type: none"> ● Gather multiple sources of data. ● Identify student strengths and weaknesses. 	<ul style="list-style-type: none"> ● Assist teachers in collecting data, analyzing the data, and identifying student strengths and needs.
Develop the SLO	<ul style="list-style-type: none"> ● Complete the SLO template. ● Summarize the data analysis. ● Describe the student population. ● List the assessment. ● Set the growth targets. ● Write the rationale. 	<ul style="list-style-type: none"> ● Ensure that teachers write SLOs in a timely manner. ● Provide adequate information and support in helping teachers develop SLOs. ● Answer questions and provide materials and support as needed.
Submit the SLO for Approval	<ul style="list-style-type: none"> ● Submit the SLO for approval. ● Revise and resubmit, if needed. 	<ul style="list-style-type: none"> ● Actively participate on the SLO approval team. ● Ensure that teachers receive constructive feedback on SLOs in a timely manner, as needed. ● Approve SLOs ● Support teachers in revising SLOs as needed.
Meet to Discuss SLO Progress	<ul style="list-style-type: none"> ● Monitor interim student progress. ● Collect data. ● Participate in midcourse conversation about student learning. 	<ul style="list-style-type: none"> ● Schedule and facilitate midcourse discussion of student progress.
Score and Discuss the SLO	<ul style="list-style-type: none"> ● Administer summative assessment. ● Calculate the percentage of students who met their growth targets. ● Participate in conversation about student learning. 	<p>Administrator Only</p> <ul style="list-style-type: none"> ● Schedule and facilitate scoring conversation. ● Review SLO results and determine the SLO score. ● Submit final SLO scores to district personnel.

Decision Point 10. Support Teachers with Ongoing Professional Development

Before teachers undertake the process of writing SLOs, it is critical that district and school leaders articulate expectations, share a common vision for the work, and respond to teachers' concerns and questions. Answering questions and acknowledging the potential SLOs have for contributing to higher quality conversations about instruction are essential. If district and school leaders, particularly members of the building-level SLO team, do not clearly articulate the value of the work and provide a common vision for SLO implementation, teachers and administrators may view SLOs as a compliance activity rather than a meaningful process. In addition, setting up systems to provide consistent communication on SLOs can help facilitate the SLO process.

Teachers should receive high-quality training and preparation for writing and implementing SLOs. Building-level SLO approval teams also should receive training in writing and approving SLOs. Calibration training within each school and among schools throughout the district is strongly encouraged to ensure that SLOs have a standard level of quality. In addition, districts need to assess the level of professional knowledge on assessment and data literacy and plan ongoing professional learning opportunities for teachers and administrators that ensure each stakeholder has the skills needed to select, create, and/or evaluate assessments used in the SLO process.

Decision Point 11. Develop a Data Management and Technical Support Plan

Having a coordinated and integrated data management system that allows teachers, school-based administrators, and district staff to easily create, monitor, make changes to, and submit their SLOs can easily be overlooked but also can greatly increase the likelihood that the process will run smoothly. For each of the stakeholders involved in the process, the data system needs to ensure secure and easy access to data needed for each phase of the SLO process.

Specifically, teachers should be able to:

- Access student data files, including but not limited to the results of assessments that are being used in the development of the SLO.
- Access the SLO template online in a format that allows for the inclusion of all needed and expected data types and permits attachments of different file types that support the development of high-quality SLOs.
- Begin the development process, make changes and edits before submission for approval, track feedback and approval post-submission, and, if appropriate, make changes and resubmit the SLO if midcourse corrections are made and approved.
- Add assessment data during the SLO cycle that support tracking growth toward targets (using an online spreadsheet)
- Submit final (post-assessment) data at the end of the interval of instruction.
- Adjust student population data based on student entry or withdrawal status.
- Enter any post-process comments or evidence, including attaching supporting artifacts.
- Track the final scoring process.

School based administrators should be able to:

- Monitor SLO creation and submission by teachers, including the ability to review and receive warnings about teachers who are out of compliance with the timeline for submissions.
- View submitted SLOs and provide approval and comments as well as review, comment on, and send SLOs back to teachers who need to revise their submissions.
- Review SLO documents and attachments during teacher conferences at all stages of the process.
- Evaluate and accept or reject midcourse changes, including reviewing any student data submitted during the SLO cycle.
- Analyze summative student data and compare those submitted data to other data sources.
- Confirm and approve the summative score that teachers are assigned.
- Submit the SLO score as part of the overall evaluation score.
- Examine teacher-level, grade-level, subject-area, and whole-school SLO results.

Central office departments should be able to:

- Review progress of SLO creation and submission by teacher, grade level, and school level.
- Monitor the submission and approval process timelines, including the ability to receive reports about teachers or administrators who are out of compliance with district timelines.
- Review submitted SLOs for quality audits and disaggregate those SLOs by subject area, assessment type, grade level, and other demographic data.
- Review summative results reports by student classification (e.g., those with individualized education programs [IEPs], ELLs), teacher demographic data, class, subject area, and so on.
- View data reports that help identify specific action steps for ongoing professional development and adjustments to the SLO process, including both qualitative and quantitative data sources. Examples include the ability to review SLO assessment data (quantitative) as well as which components of the SLO template are receiving the highest scores during the review and approval process (qualitative).

This list of decision points is a strong place to start in creating policy for implementing SLOs in your district or ISD. As stated previously, the list of decision points is not exhaustive and each school district has a unique context in which to implement SLOs.

The Teacher Role: Writing an SLO

The MDE identifies six steps that teachers may take to write an SLO. This section delves deeply into **SLO development**, or writing the SLO. These steps are aligned with the phases of SLO cycle described in Decision Point 5, but are listed here in steps to provide sequential guidance to teachers for writing an SLO.

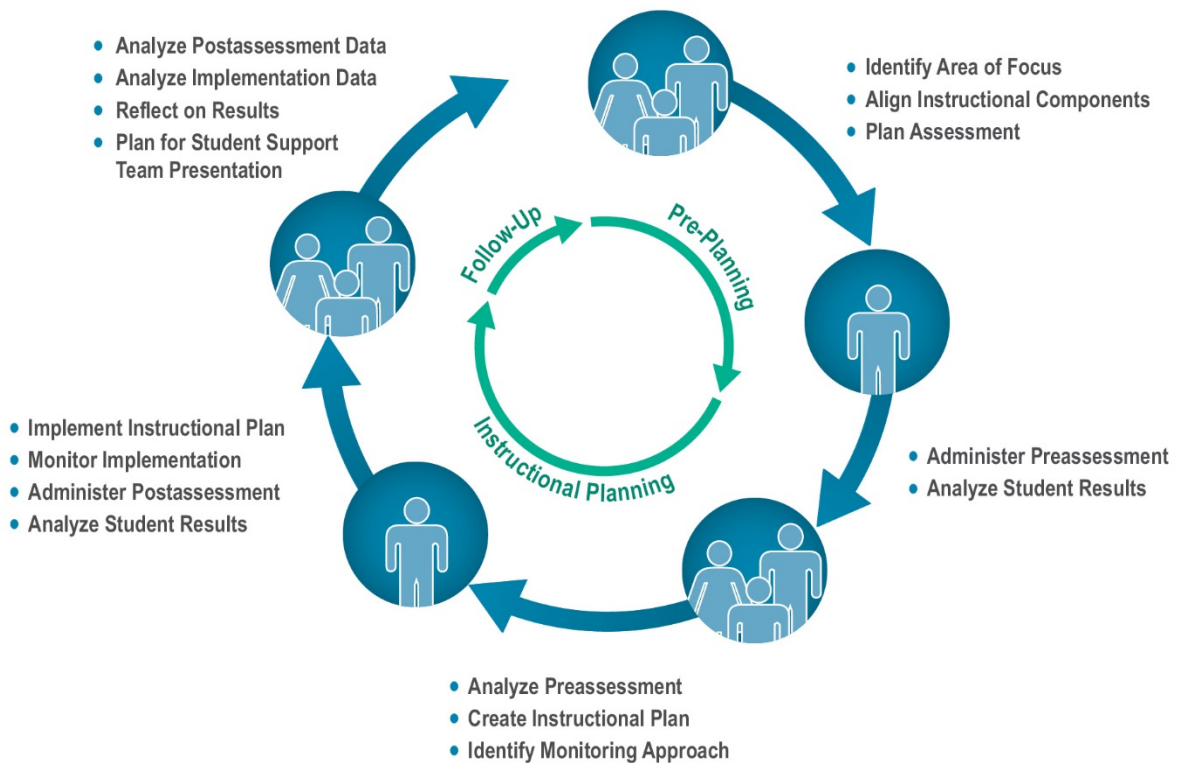
Although districts have flexibility to shape the SLO process to fit local contexts, the MDE recommends that teachers use the steps listed in Box 2 to write an SLO.

Box 2. Writing an SLO

1. Confirm the interval of instruction.
2. Gather and review available student assessment and demographic data.
3. Identify the content and standards addressed by the SLO.
4. Depending on the specific SLO model adopted by the district, identify the assessment or assessments and create growth targets.
5. Submit the SLO and prepare for review and approval.
6. Prepare for SLO rating and discussion.

Remember, steps included in the SLO cycle are closely aligned with the steps of the Instructional Learning Cycle.

Figure 6. Instructional Learning Cycle



1. Confirm the Interval of Instruction

The interval of instruction is the time period during which the educator expects growth to occur. In other words, it is the length of the course (i.e., year-long, semester-long). For example, an elementary which meets daily would have an interval of instruction that would be the duration of the academic year. The interval of instruction for a high school elective course may be one semester. The educator also should consider noting when pre-assessments, formative assessments, interim assessments, and post-assessments will be administered during the interval of instruction.

2. Gather and Review Available Data

Collect the Data. SLOs should be based on a teacher’s clear understanding of the student population and the students’ unique strengths, challenges, and circumstances. To begin the development process, teachers should gather baseline academic data to better understand how prepared their students are for the standards addressed by the course. These data could include end-of-year data from the previous year, data from district assessments, pretests, and student work samples. After teachers have identified curricular priorities and gathered baseline data, they are ready to conduct a detailed analysis of student data. In addition, growth targets need to be set with specific student demographic data in mind. Teachers need to be able to identify the factors that might impact a student’s ability to meet the growth targets and be able to discuss how much of an impact those factors are likely to have on a specific student’s growth. Although districts should provide general guidance to teachers on which factors can be considered, the MDE

suggests allowing teachers to use their professional judgement in assigning the magnitude of the impact of each of the factors. Any adjustment to growth targets based on student demographic data needs to be clearly articulated in the student data section and growth target rationale section of the SLO.

Analyze the Data. Conducting an analysis of the student data helps the educator(s) determine where students will need to demonstrate the most growth. Teachers, teams, administrators, instructional coaches, data coaches, and other qualified school personnel should be part of the data analysis process as needed.

Each teacher’s analysis of the data will be reviewed more closely during the SLO approval process.

3. Identify the Learning Standards Addressed by the SLO

The learning standards should articulate the specific concepts or skills (content, 21st Century Skills, technology skills, social and emotional skills, etc.) that students will gain during the course. They should include the areas highlighted during the data analysis.

4. Identify the Assessment and Create Growth Targets

Identify the Assessment. The MDE has provided a hierarchy of assessments that can help guide the assessment selection process. The MDE recommends that districts select appropriate, content-aligned assessments for teachers that match the subjects and standards they teach. When the decision makers are choosing an appropriate assessment, the items on the test should cover all identified standards for the grade level. Districts are encouraged to select the assessment(s) that are most appropriate for measuring student growth in the subject area of the SLO. To increase their confidence in the data:

The MDE strongly recommends that districts select or suggest assessments that have the greatest reliability and validity.

Generally, those are either assessments created at the district level or those that are commercially available, as those assessments have been reviewed for reliability, validity, and alignment to both standards and the cognitive complexity identified in the standards. Please refer to Appendix D for the MDE assessment hierarchy. Note that teacher-created assessments generally provide the least reliable data; therefore, the MDE recommends using individual teacher-created assessments only when other more reliable assessments are not available.

If a teacher must create an assessment that is unique to his or her classroom, the MDE advises that teachers develop the assessment in collaboration with a school or district administrator with expertise in assessment, a special educator, an ELL specialist, and/or a content team member. At

a minimum, the assessment should be reviewed at the district level by content experts in the relevant grade or subject level.

Develop the Student Growth Target(s). Teachers should write specific growth targets for the students included in the SLO. A growth target should include numeric indicators of growth, such as percentages that demonstrate an increase in learning between two points in time. The target should be rigorous yet attainable, as determined by the baseline or pretest data.

High-quality SLOs include strong justifications for why the student growth targets are appropriate and achievable for students. The rationale should be a precise and concise statement that describes the student needs and refers to the evidence that informed the creation of the target. The rationale also should reference school and district goals.

On the surface, setting growth targets might seem like an easy task. Based on what a teacher knows about a student’s learning and abilities and using the pre-assessment score, a prediction is made about where a student’s learning will place them on the post-assessment. But, in practice, most educators recognize that even with an abundance of data, including historical data about each student, growth target setting is not an exact science. There are many factors that impact a student’s ability to perform on any given assessment. As teachers gain more practice and a better understanding of what factors should be considered when setting and adjusting growth targets, their ability to accurately set growth targets improves. The other factor that impacts a teacher’s ability to accurately set growth targets is ongoing training in the growth target-setting process. Districts have a special responsibility to provide multiple opportunities for teachers and administrators to engage in the growth target-setting process before asking teachers to set growth targets for the purposes of SLOs as an evaluation tool.

5. Submit the SLO and Prepare for Review and Approval

Prior to submitting an SLO, the educator should do a final comparison with the MDE SLO Template Checklist found in Appendix B. Then, the SLO should be reviewed by the school-building SLO committee or the designated SLO approval person(s). **If the SLO is not approved, the district should implement a deadline by which the educator can complete requested revisions and then resubmit the SLO.**

6. Prepare for SLO Rating and Discussion

In preparation for scoring the SLO, the educator may want to:

- Transfer the growth targets and post-assessment scores to a simple table to provide the administrator with a quick reference to determine whether stated growth targets were met.
- Organize into an easily readable format the evidence to support attainment of the SLO.

The Evaluator Role

The MDE identifies the following as responsibilities of the school administrator regarding SLO implementation.

Review and Approve the SLO

The MDE recommends that the SLO approval process not be a solitary event, but rather a recursive discussion and collaborative effort between the teacher or team of teachers and the building committee. The building SLO team should be prepared to engage in a meaningful discussion with teachers on their SLOs if they have questions about the content or growth target. As the team prepares for these discussions, it is important to note that all criteria identified in the MDE SLO Template Checklist must be included in order for the SLO to be approved. Therefore, if there is a component on the checklist that is not addressed in the SLO, the team or a representative of the team will need to address the component with the teacher(s).

Prepare for SLO Rating and Discussion

In preparation for scoring the SLO, the evaluator should:

- Be prepared to carefully review the teacher's growth target results.
- Engage the teacher in meaningful conversation about the instructional practices and methods the teacher used to help students reach their growth targets.
- Discuss the instructional or behavioral challenges that may have led to students not meeting their growth targets and determine ways that these can be resolved in the future.
- Ask the teacher for suggestions on how he or she might be better supported in the SLO implementation process next year. Be prepared to follow through on the recommendations.

SLO Implementation Challenges and Solutions

During the process of implementing SLOs, decision makers, educators, evaluators, and committees are likely to encounter challenges. Table 5 displays examples of such challenges and offers possible solutions for successfully meeting them.

Table 5. Challenges and Possible Solutions for Implementing SLOs

Challenge	Possible Solution
<p>Identifying high-quality assessments for all grades and subjects</p>	<p>The MDE strongly recommends that the district SLO team conduct a course and assessment inventory review prior to implementing SLOs. By doing this type of review, with a focus on identifying assessments that are valid and provide growth measurements, the addition of new assessments can be reduced.</p> <p>Where there are gaps in assessments that provide growth data, districts need to consider what the current assessment landscape is for each individual course offering and what solutions are available.</p> <p>The MDE encourages districts to identify the most rigorous and reliable assessments for the teacher’s class that allow for the type of growth data needed for the SLO process. The assessment should be, at a minimum, reviewed at the district level by grade-level and/or content-level experts, especially in cases where there is no formally adopted state- or district-level assessment. Please review the hierarchy of assessments in Appendix D.</p>
<p>Creating appropriate growth targets for classrooms that contain students who are at different achievement levels</p>	<p>SLOs allow teachers to create growth targets that are appropriate for the teacher’s individual class, grade, or subject. Using individual or layered targets for students allows teachers to identify where each student begins the course and to determine the appropriate amount of growth for the student based on his or her baseline data.</p>
<p>Setting rigorous but realistic growth targets</p>	<p>Knowing how to set rigorous yet realistic growth targets may be a challenge for teachers. The SLO process allows teachers to review available data on previous and current students in order to set appropriate targets for students.</p> <p>By centralizing the SLO approval process at the building level, the SLO team will be able to support those teachers who set targets that are too high or too low and ensure consistency within the building. The team also may ensure that all SLOs are aligned to the academic standards, school improvement plan, and district priorities.</p>

Challenge	Possible Solution
<p>Addressing the culture change that will take place in the school or district</p>	<p>The MDE understands that the SLO process may require a significant shift in how teachers participate in their evaluation system. This shift requires support. The following processes can help with the culture change:</p> <ul style="list-style-type: none"> • Create building teams that will work together and become experts in the SLO setting and approval process. • Phase in the implementation of SLOs. • Provide consistent communication on SLOs and offer support as schools implement SLOs. This may include guidance and training on the components of an SLO and how to approve and score SLOs. It also may include providing examples of high-quality SLOs. • Offer professional development on topics that can facilitate the SLO process, such as assessment literacy, reviewing grade-level standards, and setting appropriate growth targets.

Summary of Recommendations

The list in Table 6 provides a summary of the MDE’s recommendations in this guidebook.

Table 6. Summary of Recommendations

<i>The MDE recommends that:</i>
Districts and ISDs use an SLO approach that increases SLO comparability.
Phase 1 of the SLO cycle is linked to the school improvement process of Gather and Study .
Phase 2 of the SLO cycle is linked to the school improvement process of Gather and Study .
Phase 3 of the SLO cycle is linked to the school improvement process of Plan and Do .
Phase 4 of the SLO cycle is linked to the school improvement process of Do .
Phase 5 of the SLO cycle is linked to the school improvement process of Do .
Teachers work together to write SLOs in teacher teams during at least the first year of SLO implementation.
Districts and ISDs adopt an individual accountability approach to SLO scoring.
Districts select appropriate, content-aligned assessments for teachers depending on the subject they teach.
The SLO process covers the majority of a teacher’s interval of instruction (from the beginning through the end of the course) in an effort to capture the breadth of the teacher’s instruction.
A building-level SLO team consists of the school principal and/or assistant principal, a teacher representative from each grade level and/or content area, and a special education representative.
Districts select or suggest assessments for SLO that have the greatest reliability and validity.
The SLO approval process is not a solitary event, but rather a recursive discussion and collaborative effort between the teacher or team of teachers and the building-level SLO team.

SLO Resources and Support

Although the following list of resources is not exhaustive, the websites can provide relevant information about the use of SLOs in states and districts around the country.

Center on Great Teachers and Leaders

To support states and districts in developing and implementing SLOs, the Center on Great Teachers and Leaders, also known as the GTL Center, is curating a searchable collection of SLO resources. The website includes an SLO Resource Library that boasts documents such as detailed modules on SLO implementation and scoring, sample SLOs, and recent publications on SLOs.

<http://www.gtlcenter.org/learning-hub/student-learning-objectives>

Center for Assessment

The Student Learning Objective Toolkit is a resource developed by the Center for Assessment to help educators map out the process for developing high-quality SLOs. The toolkit currently consists of video modules, SLO templates, SLO planning information, and other helpful materials.

<http://www.nciea.org/slo-toolkit/>

Ohio Department of Education

The Ohio Department of Education (ODE) has developed a robust system of measuring student growth. The state's implementation of SLOs is considered a model across the country. The ODE website includes sample SLOs of various subjects and grade levels, an assessment selection guide, and an extensive selection of responses to frequently asked questions.

<http://education.ohio.gov/Topics/Teaching/Educator-Evaluation-System/Ohio-s-Teacher-Evaluation-System/Student-Growth-Measures/Student-Learning-Objective-Examples/Student-Learning-Objectives-FAQs>

Reform Support Network

The Reform Support Network has compiled a toolkit of resources available to districts and educators involved in SLO implementation.

<https://www2.ed.gov/about/inits/ed/implementation-support-unit/tech-assist/targeting-growth.pdf>

Recent Research Papers on SLO Implementation

The following papers summarize the SLO implementation experiences and lessons learned from districts across the nation:

- Lachlan-Haché, L., Matlach, L., Guiden, A., & Castro, M. (2015). *What we know about SLOs: An annotated bibliography of research on evaluations of student learning objectives*. Washington, DC: American Institutes for Research.
- Lachlan-Haché, L. (2015). *The art and science of student learning objectives: A research synthesis*. Washington, DC: American Institutes for Research. Retrieved from <http://www.air.org/sites/default/files/downloads/report/Art-and-Science-of-Student-Learning-Objectives-April-2015.pdf>

References

- Donaldson, M. L. (2012). *Teachers' perspectives on evaluation reform*. Washington, DC: Center for American Progress. Retrieved from <http://www.americanprogress.org/wp-content/uploads/2012/12/TeacherPerspectives.pdf>
- Lacireno-Paquet, N., Morgan, C., & Mello, D. (2014). *How states use student learning objectives in teacher evaluation systems: A review of state websites* (REL 2014-013). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands. Retrieved from <http://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=380>
- Slotnik, W. J., Smith, M. D., & Liang, G. (2013). *Focus on Rhode Island: Student learning objectives and evaluation*. Boston, MA: Community Training and Assistance Center. Retrieved from <http://www.ctacusa.com/wp-content/uploads/2013/11/FocusOnRhodeIsland.pdf>
- TNTP. (2012). *Summer report: Creating a culture of excellence in Indiana schools*. Indianapolis, IN: Indiana Department of Education. Retrieved from <http://www.riseindiana.org/sites/default/files/files/Summer%20Report.pdf>

Appendices

Appendix A. MDE SLO Template



It is recommended that the **Student Learning Objectives (SLO) checklist be used for developing an SLO. For an SLO to be approved, all criteria in the checklist must be met.*

Name of Teacher/Teacher Team: _____

Content Area: _____ **Grade Level:** _____ **Academic Year:** _____

Type of SLO: Class-level Targeted
 Course-level Multi-course

Please see **Measuring Student Growth: An Introduction to Student Learning Objectives for a definition of each type of SLO.*

Interval of Instruction: _____

Student Population

Identify the students included in the SLO and explain why the students were selected. Describe the characteristics of the student population, including how many students have special needs relevant to the SLO (e.g., I have 4 students with reading disabilities, 2 English learners, ...).

Learning Standards or Competencies

List the state-adopted standards or competencies that are connected to the learning content.

Baseline Data

Describe the data that were reviewed in the creation of the SLO. Explain how the data support the SLO.

Assessment

Name the instrument that will be used to measure the outcome of the SLO.

Growth Targets

Identify the quantitative targets that will demonstrate achievement of the SLO. Each student included in the SLO should have a growth target.

Rationale

Explain your rationale for setting the targets for student growth; identify how the targets connect with the school improvement plan.

Instructional Strategies and Interventions

Describe the instructional strategies and interventions you will use to help students reach growth targets; share how you will monitor students' progress.

SLO Approval Committee

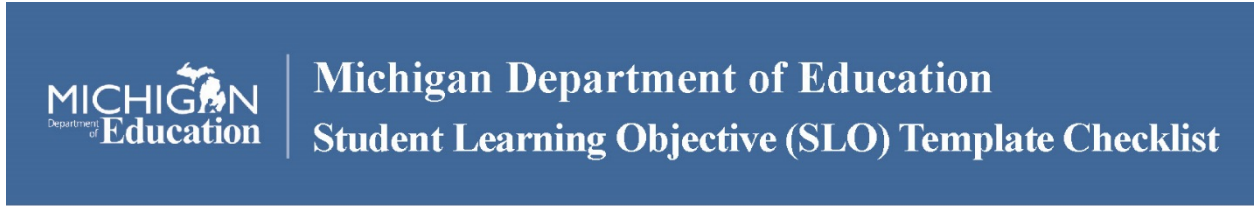
1. _____	4. _____
2. _____	5. _____
3. _____	6. _____

Approved **Not Approved**

Date: _____



Appendix B. MDE 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.

Indicator Met	INTERVAL OF INSTRUCTION	<i>What is the time period in which instruction will occur?</i>
<input type="checkbox"/>	Specifies start and stop dates which includes the majority of the course length.	Comments:
Indicator Met	STUDENT POPULATION	<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 learners...).	Comments:
Indicator Met	LEARNING STANDARDS/ COMPETENCIES	<i>What are the state-adopted standards/competencies connected to the learning content?</i>
<input type="checkbox"/>	Aligns to specific state-adopted standards.	Comments:
<input type="checkbox"/>	Represents the big ideas or domains of content taught during the interval of instruction.	Comments:
<input type="checkbox"/>	Flows to school improvement plan where applicable.	Comments:
Indicator Met	BASELINE DATA	<i>What data were reviewed in the development of the SLO? How do the data support the SLO?</i>
<input type="checkbox"/>	Identifies sources of information about students (e.g., test scores from prior years, trend data, results of pre-assessments).	Comments:
<input type="checkbox"/>	Summarizes student data to demonstrate specific student need for the learning content tied to specific standards (including strengths and weaknesses).	Comments:

Indicator Met	ASSESSMENT	<i>How will you measure the outcome of your SLO?</i>
<input type="checkbox"/>	Identifies assessments that have been reviewed by content experts to effectively measure course content and reliably measure student learning as intended.	Comments:
<input type="checkbox"/>	Selects measures with sufficient “stretch” so that all students may demonstrate learning, or identifies supplemental assessments to cover all ability levels.	Comments:
<input type="checkbox"/>	Provides a plan for combining multiple assessments if multiple summative assessments are used.	Comments:
Indicator Met	GROWTH TARGETS	<i>What are the quantitative targets that will demonstrate achievement of the SLO?</i>
<input type="checkbox"/>	Identifies baseline or pre-assessment data to determine appropriate growth.	Comments:
<input type="checkbox"/>	Ensures all students in the SLO have a rigorous and attainable target.	Comments:
<input type="checkbox"/>	Sets individual or differentiated growth targets.	Comments:
<input type="checkbox"/>	Baseline and trend data support established targets.	Comments:
Indicator Met	RATIONALE	<i>What is your rationale for setting the targets for student growth and how do they align with school improvement goals?</i>
<input type="checkbox"/>	Demonstrates teacher knowledge of students and content.	Comments:
<input type="checkbox"/>	Explains why target is appropriate for the population.	Comments:
<input type="checkbox"/>	Uses data to identify student needs and determine appropriate targets.	Comments:
<input type="checkbox"/>	Explains how targets align with broader school and district goals.	Comments:
<input type="checkbox"/>	Sets rigorous expectations for students and teachers.	Comments:
Indicator Met	INSTRUCTIONAL STRATEGIES AND INTERVENTIONS	<i>What instructional strategies or interventions will you use to help students reach growth targets?</i>
<input type="checkbox"/>	Lists evidence-based teaching strategies/interventions.	Comments:
<input type="checkbox"/>	Explains how teaching strategies/interventions will be used to support student learning.	Comments:
<input type="checkbox"/>	Describes how student progress will be monitored.	Comments:

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 a course for all students or a subset of students. SLOs are focused on the most valuable learning that is to take place in a course. They are specific and measurable goals that are based on student data and aligned to curriculum standards.

Why consider SLOs?

SLOs are one way to measure the academic growth of students. They also provide a way of personalizing learning for students and of helping teachers improve instruction. Education legislation in Michigan states that student growth and assessment component of a teacher's evaluation may include the state student growth and assessment measurement standards and a local student growth assessment.

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 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 curricula, SLOs still can be used to measure student learning.

What does research say about SLOs?

Early research on the SLO process shows 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 (Slotnik, Smith, & Liang, 2013). In two recent evaluations of SLO implementation, teachers reported that the SLO process provided them with the opportunity for data use; they reported that the SLO process was an empowering aspect of their evaluations and they engaged in their evaluations more actively after SLO implementation (Donaldson, 2012; New Teacher Project, 2012). Finally, positive correlations have been found between the quality of SLOs and student achievement.

How are SLOs being used and implemented?

Some states and districts across the country currently use SLOs in an effort to measure student progress and improve instruction. A review of publicly available documents found that 35 states have policies or recommendations related to the use of SLOs in their educator effectiveness systems.

What are the types of SLOs?

There are four types of commonly used SLOs. Each covers a unique group of students.

A **class-level SLO** includes all students in a particular class.

A **course-level SLO** includes all students in a particular course.

A **targeted SLO** includes a specific group or groups of students in a class or course, usually for the purpose of targeted skill development.

A **multi-course SLO** includes specific students throughout classes or grade levels.

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.

How does SLO implementation flow with the school improvement process?

In an effort to ensure alignment and integration of the use of SLOs with other initiatives, the SLO process follows and is linked to Michigan's school improvement planning process, which includes data analysis, goal setting, goal refinement, and evaluation. Although the school improvement process focuses on the goal attainment of the entire school, SLOs are specific to the content a teacher is responsible for teaching. In this way, SLOs can serve as an extension of the school improvement process.

How will the Michigan Department of Education support SLO implementation?

Although the use of SLOs as a measure of student growth is not required, the Michigan Department of Education (MDE) has consulted with other states and districts to gain useful information about SLO implementation. To that end, MDE will provide documents, such as an SLO checklist, template, and an SLO decision-making guide that can be used to help implement SLOs at the local level. MDE also will provide resources for training and support.

What online resources might be useful in my search for more information about SLOs?

Although the following list is not exhaustive, the websites can provide complementary information about the use of SLOs in states and districts around the country.

- **Center on Great Teachers and Leaders:** <http://www.gtlcenter.org/learning-hub/student-learning-objectives>

SLOs are emerging as one measure to assess teachers' contributions to student growth in educator evaluation systems. To support states and districts in developing and implementing SLOs, the Center on Great Teachers and Leaders is curating a searchable collection of SLO resources.

- **Center for Assessment SLO Toolkit:** <http://www.nciea.org/slo-toolkit/>

The Center for Assessment developed the Student Learning Objective Toolkit to help educators plan for developing quality SLOs. The toolkit currently consists of video modules, SLO templates, SLO planning information, and other helpful materials.

- **Reform Support Network:** <https://www2.ed.gov/about/inits/ed/implementation-support-unit/tech-assist/targeting-growth.pdf>

The Reform Support Network has compiled a toolkit of resources available to districts and educators involved in SLO implementation.

Who can I contact at MDE to learn more about SLO implementation?

For more information about the use of SLOs in Michigan, please contact MDE-EdEvals@michigan.gov.

References

Donaldson, M. L. (2012). *Teachers' perspectives on evaluation reform*. Washington, DC: Center for American Progress. Retrieved from <http://www.americanprogress.org/wp-content/uploads/2012/12/TeacherPerspectives.pdf>

New Teacher Project. (2012). *Summer report: Creating a culture of excellence in Indiana schools*. Indianapolis, IN: Indiana Department of Education. Retrieved from <http://www.doe.in.gov/sites/default/files/evaluations/tntp-summer-report-june-2012.pdf>

Slotnik, W. J., Smith, M. D., & Liang, G. (2013). *Focus on Rhode Island: Student learning objectives and evaluation*. Boston, MA: Community Training and Assistance Center. Retrieved from <http://www.ctacusa.com/wp-content/uploads/2013/11/FocusOnRhodeIsland.pdf>

Appendix D. Hierarchy of Assessments

