Algebra 1 Sample SLO
(Student Learning Objective)

Name(s): **Doug Greer & Mike Klavon (with AIR)** Content Area: **Algebra 1** Grade Level: **9th**

Instruction Interval: **Semester 1 (Aug 29 – Jan 12)** (Specify start and stop dates which include majority of course)

SLO Type: ☐ Class-level or ☒ Course-level/Grade-level   and (optional)   ☐ Targeted or   ☐ Tiered

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1. Student Population (Optional)

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

    MDE Checklist Criteria for Student Population:
- ☐ Describes the characteristics of the student population accurately and how special needs may have relevance to the SLO
- ✓ 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?

Although I have four preps, Algebra 1 is at the heart of the SAT and has the most essential standards within the HS courses. There are 90 students in my three sections of Algebra 1. I will describe the population when I'm back in my district to examine my roster and student files. (Optional)

2. Learning Standards

What are the essential standards or competencies connected to the learning content? *Support Video #2 OH*

    Checklist Criteria for Learning Standards:
- ✓ Aligns to specific state-adopted standards
- ✓ Represents the essential standards or the big ideas to be taught during the course of instruction
- ✓ Reaches the appropriate level of complexity for each state-adopted standard measured

One of our school improvement goals is to increase our math scores on the SAT. After meeting with the secondary math department, I will list the essential standards here. Essential standards are those standards that are emphasized on the SAT and meet the other three criteria of Dr. Reeves: Readiness, Leverage, and Endurance. We will likely use the work of the Ottawa Area ISD as a reference or starting point. The OAISD worked with over 30 math teachers from across nine high schools to establish the following 17 essential standards in semester 1 of Algebra 1: https://goo.gl/VhWA5K

3. Baseline Data

What data were reviewed in the development of the SLO? How do the data support the SLO? *Support Video #3 OH; Data Template OH*

    MDE Checklist Criteria for Baseline Data:
- ✓ Identifies sources of information about students (e.g. prior year test scores, trend data and/or pre-tests)
- ✓ Summarizes student data to demonstrate specific student need for the learning content tied to specific standards, includes strengths and weaknesses..

Advanced	Benchmark	Strategic/"At Risk"	Intensive
"Advanced" on prior year State Assessment	"Proficient" on the prior year State Assessment	"Partially Proficient" on prior year State Assessment	"Not Proficient" on prior year State Assessment
Advanced on prior teacher rating (i.e., exam, grades, etc.)	Proficient or higher on prior teacher rating	Not "Advanced" on prior teacher rating	Strategic/At Risk or Intensive on prior teacher rating
Fall Screener (Delta Math) met benchmark on all Alg. 1 readiness standards	Fall Screener (Delta Math) met benchmark on all Alg. 1 readiness standards	Fall screener met benchmark on at least 4 readiness standards	Fall screener met benchmark on 3 or fewer of the Alg. 1 readiness standards
3 data points = triangulation	Optional 4th point	Other (i.e., student survey)	
7 students	24 students	47* students	12 students

* 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.

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4. Assessment

How will you measure the outcomes of this SLO, which tool(s) will be reviewed to determine success criteria? *Support Video #4 OH;*
Assessment Checklist IN

      Checklist Criteria for Learning Standards:

- ✓ Describes assessment alignment to the course content and emphasizes constructed-response or performance tasks that require higher-order thinking skills
- ✓ Indicates that there are clear answer key, scoring guides and/or rubrics for all assessment items.
- ✓ Provides a plan for combining multiple assessments if multiple summative assessments are used.

Student outcomes on the unit tests will determine the final categories. Throughout the school year, prior to the unit of instruction beginning, we will examine each unit test to assure essential standards have sufficient evidence, an appropriate balance of selected response and free response questions, and the items align to the rigor of the state test. For standards where success criteria are at a higher rigor (i.e., DOK 3), items for the standard will be scaffolded such that there will be both lower complexity items (i.e., DOK 1 or 2) and higher complexity (i.e., DOK 3). Where appropriate, we may embed sample items from high stakes test and/or other item banks in which we have access. These item banks should assure reliability, validity and a lack of bias. The categories for the growth target will illustrate the plan for combining these unit assessments and tracking student progress

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5. Growth Targets

What are the quantitative targets that will demonstrate achievement of this SLO? Each student included in the SLO should have a growth target summarized or specified below. *Support Video #5 OH; Samples collected by MASSP or found at these state departments: LA, RI, OH, or NY*

      MDE Checklist Criteria for Learning Standards:

- ✓ Baseline data and/or trend data used to support growth targets
- ✓ Ensures all students in this SLO have a rigorous and attainable target, consider setting differentiated growth targets
- ✓ Demonstrated use of data to identify student needs and determine appropriate targets, consider individual or differentiated growth targets

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Advanced	**Benchmark**	**Strategic/"At Risk"**	**Intensive**
Students will demonstrate mastery on all 9 essential standards in Unit 1	Students will demonstrate mastery on all 9 essential standards in Unit 1	Students will demonstrate mastery on at least 7 essential standards in Unit 1	Students will demonstrate mastery on 12 or fewer of the Unit 1 & 2 essential standards
Students will demonstrate mastery on all 8 essential standards in Unit 2	Students will demonstrate mastery on all 8 essential standards in Unit 2	Students will demonstrate mastery on at least 6 essential standards in Unit 2	Students will master at least 5 of the 6 Algebra 1 Readiness Standards on Delta Math
Students will score at least 85% on all tests and quizzes	Students will score at least 70% on all tests and quizzes	Students will score at least 60% on all tests and quizzes	Students will master at least 7 of the 17 essential standards
3 data points = triangulation	Optional 4th point	Other (i.e., student survey)	
15 students	**60 students**	**12 students**	**3 students**

Based on the ability of students to show mastery on the 17 essential standards as measured by the seven unit tests in semester 1, the table would alter a bit to show the breakdown of each unit. I expect at least 80% of my student (75 students) will show mastery on all 17 essential standards; this includes the majority of my "At Risk" students moving up into the "Benchmark" by the end of the semester. Nearly all students will maintain a high category or grow one category. Any student who does not, I expect to at least master a good portion of the 17 essential standards and the readiness standards from the Fall screener.

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6. Rationale

What is your rationale for setting the targets for student growth and how do they align with school improvement goals? *Support Video #6 OH*

        MDE Checklist Criteria for Learning Standards:

- ✓ Demonstrates teacher knowledge of students and content.
- ✓ Explains why target is appropriate for the population.
- ✓ Justifies rigorous and attainable goals referencing data and/or student needs
- ☐ Explains how targets align to broader school and district goals.

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Based on this first year of increasing the rigor of all unit assessments, this goal meets the rigor of high stakes assessments and requires mastery of all essential standards. Students are entering my class with varying levels of foundational knowledge and skills required in Algebra 1. I do not have trend data on the use of these interim assessments, so the rigor and attainability are yet to be determined. The regular PLC meetings will help to determine rigor and attainability. I'm looking forward to the dialogue around data.

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7. Instructional Strategies and Interventions (Optional to be determined by the District)

What instructional strategies or interventions will you use to help students reach growth targets? (NEW section to MDE template Feb., 2016)

        Checklist Criteria for Learning Standards:

- ✓ List evidence-based teaching strategies/interventions.
- ✓ Explains how teaching strategies/interventions will be used to support student learning.
- ✓ Described how student progress will be monitored (if not already addressed in Assessment section).

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I believe I'm currently at a level 1 on A1 (5D+) and intend to reach a level 3 (proficiency) described as: "Students frequently assessing their own learning in relation to the success criteria for the learning targets." This is also the cornerstone of Marzano's Framework for elements 1 and 2. Finally, students tracking the essential learnings of the unit was rated as the highest effect size by Hattie's meta-analysis. The math department and I will look into the best ways for our students to track their own progress on the essential standards. I will provide formative assessment opportunities for students to monitor their progress on the essential standards.

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Comments from Approval Committee Members

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==This SLO may be scored by a district level scoring guide, find samples on the== SI Timeline ==for SLO== Box 5 & 6

SLO ☐ Approved ☐ Modifications required (see notes below)

SLO Approval Committee	Date	Signature
_____ Department chair	10/30/2017	_____
_____ Teacher	10/30/2017	_____
Additional Names ...	_____	_____
_____ Principal	11/3/2017	_____

SAMPLES are available using this template: Elem Math, MS Science, Algebra 1 and HS Visual Arts.

For sample SLOs done by various states, the formats are slightly different, though the components are the same, visit: Louisiana, Rhode Island, Ohio, or New York or the collection by content area from MASSP.