

**Fourth Grade Math  
Example SLO**

A Student Learning Objective (SLO) is a detailed process used to organize evidence of student growth over a specified period of time. The SLO process is appropriate for use in all grade levels and content areas and establishes meaningful goals aligning curriculum, instruction, and assessment. This template guides teachers and evaluators through a collaborative SLO process. Portions of this template were adapted from the Center for Assessment *SLO Toolkit*. In addition, domains and components that may align with each element of the template are included from the Danielson Group *Framework for Effective Teaching* to support discussion between teachers and evaluators.

Check boxes are included throughout the template to document the initial discussion and approval of each element. Evaluators may include written feedback concerning each element directly into the template using a different font color.

**Educator Information**

Academic Year	2015-2016
Educator Name	Example Teacher
School Name	Example School
District Name	Example District

**Planning Information**

Course/Subject Name	Math
Brief Course Description	In Grade 4, instructional time is focused on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.
Grade Level(s)	4
Interval of Instruction	9/1/15 - 2/15/16

**Timeline and Sign-Off**

Evaluator Name and Title	Example Evaluator
Initial SLO Evaluator Sign-Off	9/1/15
Midcourse Check-In Sign-Off	11/15/15
Description of changes made during the Midcourse Check-In:  The growth target for Amy was adjusted from approaching to meeting due to examples of student course work indicating that she was on track to exceed her initial target. In addition, Jason and Marci were removed from the SLO due to an extended school absence.	

Due Date of Final SLO	2/15/16
-----------------------	---------

### Element #1: Learning Goal

A learning goal is a description of what students will be able to do at the end of a specified period of time aligned to appropriate learning standards. The development of a learning goal provides a solid foundation for meaningful, goal directed instruction and assessment. The learning goal encompasses a big idea that integrates multiple content standards.

#### Domain 1: Planning and Preparation

1a Demonstrating Knowledge of Content and Pedagogy  
1c Setting Instructional Outcomes  
1e Designing Coherent Instruction

#### Domain 3: Instruction

3c Engaging Students in Learning

<input checked="" type="checkbox"/> Describe the learning goal.	Student will solve multistep word problems using the four operations with whole numbers.
<input checked="" type="checkbox"/> What big idea is supported by the learning goal?	The big idea supported by the learning goal is the use of the four operations with whole numbers to solve multistep word problems (i.e., addition, subtraction, multiplication, and division).
<input checked="" type="checkbox"/> Which content standards are associated with this big idea? <i>List all standards that apply, including the text of the standards (not just the code).</i>	<p><b>New Illinois Learning Standards</b></p> <p>CCSS.Math.Content.4.OA.A.1 Interpret a multiplication equation as a comparison (e.g., interpret <math>35=5\times 7</math> as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>CCSS.Math.Content.4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p> <p>CCSS.Math.Content.4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using</p>

	<p>equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p><u>Mathematical Practices</u></p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>6. Attend to precision.</li> </ol>
<input checked="" type="checkbox"/> Describe the student population.	The student population includes 25 fourth grade students. In addition, Amy has an IEP for a specific learning disability in writing, and Elizabeth is categorized as an English Learner.
<input checked="" type="checkbox"/> Describe the instruction and strategies you will use to teach this learning goal. <i>Be specific to the different aspects of the learning goal.</i>	Students will engage in regular opportunities to solve word problems using the context of their daily lives as examples. Students will learn specific problem-solving strategies that will serve as scaffolds promoting student independence. In addition, instruction will move from the concrete, to the representational, to the abstract using manipulative models.
<input checked="" type="checkbox"/> Identify the time span for teaching the learning goal (e.g., daily class-45 minutes for the entire school year).	Fourth grade students engage in at least one hour of mathematics instruction each day throughout the entire school year. Learning to solve multistep word problems using the four operations with whole numbers is incorporated throughout the school year. The big idea is revisited throughout the year as students increase their skills and understanding.
<input checked="" type="checkbox"/> Explain how this time span is appropriate and sufficient for teaching the learning goal.	This is a focus skill, so it will be presented repeatedly for mastery throughout the year.

#### Questions to Guide Discussion

- Why is this learning goal important and meaningful for students to learn?
  - The ability to solve word problems using the four operations with whole numbers is important because word problems help students develop problem-solving skills within contextualized settings that do not require application of rote procedures.
- In what ways does the learning goal require students to demonstrate deep understanding of the knowledge and skills of the standards or big idea being measured (e.g., cognitive complexity)?
  - After completing the mathematics, students will have to reflect back on the problem to interpret the fractional answer to best answer the question in a variety of situations. Word problems challenge students to apply mathematical concepts to practical real world situations.

## Element #2: Assessments and Scoring

Assessments and evaluation procedures should be used to support and measure the learning goal. Consider how the assessment and evaluation procedures will be used to monitor student growth over multiple points in time in order to inform and differentiate instruction for all students.

### Domain 1: Planning and Preparation

1d Demonstrating Knowledge of Resources

1f Designing Student Assessments

### Domain 3: Instruction

3d Using Assessment in Instruction

<input checked="" type="checkbox"/> Describe the assessments and evaluation procedures (e.g., performance tasks, rubrics, teacher-created tests, portfolios, etc.) that measure students' understanding of the learning goal.	Students will demonstrate their understanding of the learning goal using commonly developed performance tasks that require students to complete multistep word problems that increase in complexity throughout the school year. Students will add these completed performance tasks to a portfolio that also includes student generated word problems. Performance tasks will be evaluated using a commonly developed rubric. In addition, formative assessment will be used to regularly check for student understanding.
<input checked="" type="checkbox"/> Describe how the assessments and evaluation procedures may be differentiated to meet the needs of all students described in the student population.	Assessments will be differentiated for Amy according to the accommodations included in Amy's IEP. Elizabeth will be provided with extended time and all directions and prompts will be read aloud.
<input checked="" type="checkbox"/> Explain how student performance is defined and evaluated using the assessments. Include the specific rubric and/or evaluation criteria to be used.	The common performance tasks and formative assessment are scored using a rubric that includes four performance levels based on the districts standards based report card (e.g., below, approaching, meeting, exceeding).

### Questions to Guide Discussion

- How often will you collect data to monitor student progress toward this learning goal?
  - Trend data and formative assessment will be used at the beginning of the school year to determine students starting points and initial placement into performance levels. Completed performance tasks will be added to each student's portfolio at the end of each unit of instruction throughout the school year. Formative assessment will be used throughout each unit of instruction and added to each student's portfolio when appropriate.
- How will you use this information to monitor student progress and to differentiate instruction for all students toward this learning goal?
  - As students solve and interpret multistep word problems, their progress will be observed and recorded. Students who are having difficulty will be shown different strategies, such as color coding diagrams, using manipulatives or breaking apart the problem to better understand the

parts. If students are having difficulty using division, they will be allowed to use a calculator to check their computation before they determine their solution. Continued work on a variety of division algorithms will be included in this remediation. If the difficulty is with reading and understanding the problem, we will work to break down the problem or find word problems in an area that the student has prior knowledge to aid in their comfort with the topic. For students who demonstrate early mastery of the skill, they will be challenged with more complex scenarios, and asked to create more complex problems.

### Element #3: Expected Growth Targets

In order to identify expected growth targets, educators must first identify students' actual performance through a review of available data reflecting students' starting points (i.e., baseline) concerning the learning goal. After the expected growth targets are identified, both the teacher and evaluator should reflect on whether the growth targets are ambitious, yet realistic for students to achieve in the specified period of time.

#### Domain 1: Planning and Preparation

1b Demonstrating Knowledge of Students

1c Setting Instructional Outcomes

<input checked="" type="checkbox"/>	Identify the actual performance (e.g., test scores, performance tasks, etc.) to establish starting points (i.e., baseline) for students.	<table><tr><th></th><th>EL</th><th>LD</th><th>Group 1</th><th>Group 2</th><th>Group 3</th></tr><tr><td>Below</td><td></td><td>1</td><td>5</td><td></td><td></td></tr><tr><td>Approaching</td><td>1</td><td></td><td></td><td>12</td><td></td></tr><tr><td>Meeting</td><td></td><td></td><td></td><td></td><td>1</td></tr><tr><td>Exceeding</td><td></td><td></td><td></td><td></td><td></td></tr></table>		EL	LD	Group 1	Group 2	Group 3	Below		1	5			Approaching	1			12		Meeting					1	Exceeding					
	EL	LD	Group 1	Group 2	Group 3																											
Below		1	5																													
Approaching	1			12																												
Meeting					1																											
Exceeding																																
<input checked="" type="checkbox"/>	Using students' starting points (i.e., baseline) identify the number or percentage of students expected at each growth target based on their assessment performance(s) (i.e., expected growth). Be sure to include any appropriate subgroups.	<table><tr><th></th><th>EL</th><th>LD</th><th>Group 1</th><th>Group 2</th><th>Group 3</th></tr><tr><td>Below</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Approaching</td><td></td><td>1</td><td></td><td></td><td></td></tr><tr><td>Meeting</td><td>1</td><td>1*</td><td>5</td><td>12</td><td></td></tr><tr><td>Exceeding</td><td></td><td></td><td></td><td></td><td>1</td></tr></table> <p>Note: *Updated growth target.</p>		EL	LD	Group 1	Group 2	Group 3	Below						Approaching		1				Meeting	1	1*	5	12		Exceeding					1
	EL	LD	Group 1	Group 2	Group 3																											
Below																																
Approaching		1																														
Meeting	1	1*	5	12																												
Exceeding					1																											

### Questions to Guide Discussion

- Describe the courses, assessments, and/or experiences used to establish starting points and expected outcomes for students' understanding of the learning goal (i.e., baseline data).
  - Trend data and formative assessment will be used at the beginning of the school year to determine students starting points and initial placement into performance levels.
- Explain how these expected growth targets demonstrate ambitious, yet realistic goals, for measuring students' understanding of the learning goal.
  - Word problems challenge students to apply mathematical concepts to practical real world situations that are challenging yet achievable through the scaffolding of instruction throughout the school year.

### Element #4: Actual Outcomes

#### Domain 3: Instruction

3e Demonstrating Flexibility and Responsiveness

#### Domain 4: Professional Responsibilities

4a Reflecting on Teaching

4b Maintaining Accurate Records

<input checked="" type="checkbox"/> Record the actual number or percentage of students who achieved the student growth targets. Be sure to include any appropriate subgroups.		EL	LD	Group 1	Group 2	Group 3
	Below					
	Approaching					
	Meeting	1	1	5	11	
	Exceeding				1	1

Please provide any comments you wish to include about the actual outcomes:

All students met their growth targets with the exception of Juan and Janet who exceeded their growth targets.

#### Required for Evaluator

<input checked="" type="checkbox"/> Explain how the actual number or percentage of students who achieved student growth targets translates into an appropriate teacher rating.	All students met their identified growth targets.
--	---

**Element #5: Teacher Rating**

Unsatisfactory	Needs Improvement	Proficient	Excellent
<p>Less than 25% of Students Met the Indicated Growth Target(s).</p> <p align="center"><input type="checkbox"/></p>	<p>25% - 50% of Students Met the Indicated Growth Target(s).</p> <p align="center"><input type="checkbox"/></p>	<p>51% - 75% of Students Met the Indicated Growth Target(s).</p> <p align="center"><input type="checkbox"/></p>	<p>76% - 100% of Students Met the Indicated Growth Target(s).</p> <p align="center"><input checked="" type="checkbox"/></p>
Date: 2/15/16	Evaluator Signature: <i>Evaluator</i>		
Date: 2/15/16	Teacher Signature: <i>Teacher</i>		