Louisiana Believes

Student Learning Targets in the CCSS
Classroom:
Mathematics
Objectives

By the end of the session, participants will be able to:

• Explain how goals drive classroom instruction

• Explain how each step of the goal-setting process supports the instructional priorities in a mathematics course

• Explain how the Toolbox resources support the goal-setting process

• Identify the aspects of a rigorous mathematics SLT
Why do we set goals?

How do goals drive what happens in a classroom?

How does setting goals help achieve the focus areas for mathematics?

What are our next steps?
Why do we set goals?

• Student learning targets (SLTs) are measurable goals for student achievement that reflect an ambitious, but reasonable, expectation for growth.

• Strong teacher SLTs:
  • Are aligned with a path to college or career readiness;
  • Prioritize content that is aligned to CCSS;
  • Identify a high-quality assessment to measure student progress;
  • Are aligned to leader goals.

Student learning targets establish a vision for what students should know or be able to do at the end of the year and guide the educator’s planning and instructional decisions.
Math Focus in 2014-15

Below are focus areas for students in 2014-15.

Educators’ goals should be built around these key skills.

**MATHEMATICS:**

- Master priority concepts and practice standards (not just procedures)
- Master targeted remedial content that allows faster on grade level practice
How do we align goal-setting with the 2014-15 Math focus areas?

**Goal Setting**
- What should students know/be able to do by the end of the year?
- Master math concepts of priority, on grade level standards (not just procedures)
- Master targeted remedial content that allows practice with a faster focus of on grade level content

**Priority Content**
- What do you want students to learn?
- Priority content by grade level
- Grade level fluencies

**Conceptual Understanding**
- What evidence do I have that they’ve learned it?
- Use of math practices to master concepts

**Daily Instructional Tasks**
- How can I help them learn it?
- Plan, instruct and assess using tasks that build conceptual understanding of priority standards
- Plan, instruct and assess using tasks that require fluency and use of math practices to master concepts
- Plan, instruct and assess using just enough remediation to help students practice on grade level content as quickly as possible
Math Example or Non-Example?

Based on what you currently know and understand about SLTs and the focus areas for 2014-2015, identify each as a quality example or non-example SLT.

4th Grade Math
80% of my students will achieve a score of 80% or higher on the end of year common assessment focused on the major math content for 4th grade.

3rd Grade Math
By the end of the year, 100% of my students will know from memory all products of two one-digit numbers.
What does this look like in practice?

**Partner Activity**

- Read your assigned section from the Math Guidebooks about the two priorities of Rigor and Remediation. *Note, underline, or highlight* aspects of your assigned section that reflect the focus areas.

- Be prepared to discuss the following:
  - What are the actions a math teacher should take to ensure that students are successful under the two priorities?
Setting Goals that Support Student Priorities (1/2)

### SQUARE-SHARE Activity

<table>
<thead>
<tr>
<th>If students must be able to:</th>
<th>Then educators should set goals for students that:</th>
</tr>
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<tr>
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## Setting Goals that Support Student Priorities (2/2)

### SQUARE-SHARE Activity

<table>
<thead>
<tr>
<th>If students must be able to:</th>
<th>Then educators should set goals for students that:</th>
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</thead>
<tbody>
<tr>
<td>Master priority concepts and practice standards (not just procedures)</td>
<td>Require mastery of grade level concepts</td>
</tr>
<tr>
<td>Master targeted remedial content that allows faster on grade level practice</td>
<td>Require mastery of targeted remedial content, when necessary</td>
</tr>
</tbody>
</table>
Agenda

Why do we set goals?

How do we set goals?

How does setting goals help achieve the focus areas in mathematics?

What are our next steps?
The Goal-Setting Process

1. What should students know and be able to do? How will I measure success?

2. What do students know and what are they able to do now?

3. On which students will I focus the target?

4. How will I monitor progress?
Updated SLT Guide

Step 1: What should students know and be able to do?
   How will I measure success?

Step 2: What do students know and what are they able to do now?

Step 3: Is there a group of students on which I should focus this learning target?
   - Student Learning Target
   - Scoring Plan

Step 4: How will I monitor Progress?
Priority Content

MATHEMATICS:

• Master priority concepts and practice standards (not just procedures)

• Master targeted remedial content that allows faster on grade level practice

Step 1: What should students know and be able to do? How will I measure success?

• What content will I prioritize?
• What assessment will provide the best evidence of my student’s master of the priority content at the end of the year?
Understanding Students’ Starting Points

Step 2: What do students know and what are they able to do now?

- What knowledge/skills are related to success with this year’s priority content?
- What data sources and background information are available?
- What diagnostic assessment resources are available?
- What can I conclude [insert hyperlink to support docs] about students’ mastery of prior knowledge and skills?
- Based on the data, what can I conclude about students’ readiness?
Setting Targets for All Students

**MATHEMATICS:**
- Master priority concepts and practice standards (not just procedures)
- Master targeted remedial content that allows faster on grade level practice

**Step 3:** Is there a group of students on which I should focus this learning target?

- Have I set learning targets for all of my students?
- Which subgroups in my school population need additional support to achieve success?
- Which students will need additional support to achieve success?
Step 3: Student Learning Target

• What level of performance on the end-of-year assessment from Step 1 do I expect the identified student population to achieve?
Step 3: Scoring Plan

- How will you measure your students’ success?
- Based on students’ baseline data, what is the minimum level of performance I expect from the identified students?
- Based on students’ baseline data, how many students can reasonably be expected to meet or exceed the expected level of performance?
Monitoring Progress

Math teachers plan, instruct & assess using:
• Tasks that build conceptual understanding of priority standards
• Tasks that require fluency and use of math practices to master concepts
• Just enough remediation to help students practice on grade level content as quickly as possible

Step 4: How will I monitor Progress?

• When will I monitor students’ developing mastery of the priority content?
• What curricular resources and assessment methods will I use to determine students’ mastery of the priority content on an on-going basis?
• Are these assessment methods aligned with the end-of-year assessment identified in Step 1?
Why do we set goals?

How do we set goals?

How does goal-setting help achieve the focus areas in mathematics?

What are our next steps?
MATHEMATICS:

- Master priority concepts and practice standards (not just procedures)
- Master targeted remedial content that allows faster on grade level practice

1. WHAT SHOULD STUDENTS KNOW AND BE ABLE TO DO? HOW WILL I MEASURE SUCCESS?
   
   - What **content** will I prioritize?
     - What standards are most tied to success?
     - What prior knowledge will they need to be successful?
   
   - What **assessment** will provide the best evidence of my students’ mastery of the priority content at the end of the year?
     - Will this assessment method enable me to determine how students are progressing throughout the year?

**Priority Content:**
The following statements helped me to prioritize my 4th grade math content:
(1) “While student fluency with math skills is critical, even more important is a student’s ability to show mastery of a mathematical concept.

(2) State assessments will no longer demand that students simply perform based on memorized basic procedures. Rather, just as in real life, students are asked to solve complex problems based on their mathematical understanding.” (page 11).
2. WHAT DO STUDENTS KNOW AND WHAT ARE THEY ABLE TO DO NOW?

- What knowledge/skills are related to success with this year’s priority content?
- What data sources and background information are available?
- What diagnostic assessment resources are available?
- What can I conclude about students’ mastery of prior knowledge and skills?
- Based on the data, what can I conclude about students’ readiness?

I reviewed the 2013-2014 3rd grade iLEAP results of my 25 students and calculated the average percent correct for each of the three reporting categories: 78% - Geometry and Data Measurement; 59% - Number and Operations; and 62% - Operations and Algebraic Thinking.

I then administered a teacher developed 4th grade math readiness assessment. This assessment includes 30 items (25 selected response items and 5 extended constructed response tasks) that assess student mastery of necessary skills for aligned to the major clusters of 4th grade Math. I administered the assessment in 2 sessions on separate days. A summary of student performance on this assessment is provided in the chart below.

<table>
<thead>
<tr>
<th>Readiness to Master Major Content</th>
<th># of Items</th>
<th># and % students scoring 0-30% Correct</th>
<th># and % students scoring 31-50% Correct</th>
<th># and % students scoring 51-70% Correct</th>
<th># and % students scoring 71-90% Correct</th>
<th># and % students scoring 91-100% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 4 Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Prior Grade Standards</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Operations and Algebraic Thinking (3.OA.A.1, 3.OA.A.3, 3.OA.D.8)</td>
<td>6</td>
<td>0%</td>
<td>8%</td>
<td>40%</td>
<td>40%</td>
<td>12%</td>
</tr>
<tr>
<td>Number and Operations in Base Ten (3.NBT.A.1, 3.NBT.A.2, 3.NBT.A.3, 3.NBT.A.2, 3.OA.B.5, 3.OA.C.7)</td>
<td>12</td>
<td>8%</td>
<td>20%</td>
<td>32%</td>
<td>28%</td>
<td>12%</td>
</tr>
<tr>
<td>Number and Operations - Fractions (3.NF.A.1, 3.NF.A.2, 3.NF.A.3, 3.OA.A.1, 3.OA.A.3)</td>
<td>12</td>
<td>12%</td>
<td>36%</td>
<td>44%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>
**Math Teachers Set Goals that:**

- Require students to master on grade level concepts
- Require students to master targeted remedial content, when necessary

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**3. IS THERE A GROUP OF STUDENTS ON WHICH I SHOULD FOCUS THIS LEARNING TARGET?**

- Have I set learning targets for all of my students?
- Which subgroups in my school population need additional support to achieve success?
- Which students will need additional support to achieve success?

All students will require targeted remedial support in order to be successful with current grade level standards. Therefore, all of my students (25) are the focus of this Student Learning Target. Five students have been identified as needing additional individualized support in order to be successful.

**STUDENT LEARNING TARGET:**

- What level of performance on the end-of-year assessment from Step 1 do I expect the identified student population to achieve?

80% of my students will achieve a score of 80% or higher on the end of year common assessment focused on the major math content for 4th grade (4.OA.1-3, 4.NBT.1-6, and 4.NF.1-7).

**SCORING PLAN:**

- How will you measure your students’ success?
- Based on students’ baseline data, what is the minimum level of performance I expect from the identified
Math teachers plan, instruct & assess using:

- Tasks that build conceptual understanding of priority standards
- Tasks that require fluency and use of math practices to master concepts
- Just enough remediation to help students practice on grade level content as quickly as possible

4. HOW WILL I MONITOR PROGRESS?

- When will I monitor students’ developing mastery of the priority content?
- What curricular resources and assessment methods will I use to determine students’ mastery of the priority content on an on-going basis?
  - Are these assessment methods aligned with the end-of-year assessment identified in Step 1?

Ongoing
As I plan, instruct, and assess throughout the year, I will:
1) use the 4th Grade Remediation Guide to determine student readiness for the grade level content standards.
2) assess mastery of the major content for 4th grade using Instructional and Extended Constructed Response Tasks located in the 4th Grade Math Guidebook and other teacher developed tasks.
3) administer mid and end of unit assessments that include tasks aligned to the appropriate unit standards.
4) administer 3 checkpoint assessments to determine mastery of 4.OA.1-3, 4.NBT.1-6, & 4.NF.1-7 (those taught at the time of each checkpoint assessment).
Individually, take 5 minutes to review the SLT example in full and consider:

- Does this SLT reflect the student focus areas for math?

- What will it take to get your teachers to set goals such as the exemplar provided?

- What materials/resources are available to guide teachers in this process?
# Math Goal-Setting Resources (1/2)

<table>
<thead>
<tr>
<th>Goal Setting Step</th>
<th>Resources</th>
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</thead>
<tbody>
<tr>
<td>Step 1: What do they need to know &amp; how will I measure?</td>
<td><strong>CCSS Mathematics 2014-2015 Assessment Guidance</strong></td>
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<tr>
<td></td>
<td><strong>LDE Guidebooks:</strong></td>
</tr>
<tr>
<td></td>
<td>• Grades K-2 Mathematics</td>
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<tr>
<td></td>
<td>• Grades 3-5 Mathematics</td>
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<tr>
<td></td>
<td>• Grades 6-8 Mathematics</td>
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<tr>
<td></td>
<td>• High School Mathematics</td>
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<tr>
<td>Step 2: What do they know and what are they able to do?</td>
<td>Baseline Data – readiness assessments,</td>
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<tr>
<td></td>
<td>diagnostics</td>
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<tr>
<td></td>
<td>Assessment Data (District benchmark data/State</td>
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<td></td>
<td>test results</td>
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## Math Goal-Setting Resources (2/2)

<table>
<thead>
<tr>
<th>Goal Setting Step</th>
<th>Resources</th>
</tr>
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</table>
| **Step 3:** Is there a group of students on which I should focus this learning target? | • Baseline Data (class, subgroups, major content of prior grades)  
• School Leader SLTs  
• 2013-2014 SLT results  
• Assessment data (District benchmark data/*State test results*) |
| **Step 4:** How will I monitor progress? | **CCSS Mathematics 2014-2015 Assessment Guidance**  
**Assessment Resources:**  
• Common Benchmark Assessments  
• **EAGLE**  
• Sample Assessment Items  
• Eureka Math - Mid and End of Module Assessments  
**LDE Guidebooks Tasks & Remediation Guides:**  
• Grades K-2 Mathematics  
• [Grades 3-5 Mathematics](#)  
• [Grades 6-8 Mathematics](#)  
• [High School Mathematics](#) |
Why do we set goals?

How do we set goals?

How does goal-setting help achieve the focus areas in mathematics?

What are our next steps?
Next Steps

Making a Plan

- Who should be involved in disseminating this information?
- What structures are already in place to guide this process?
- What will teachers need help with?
- How can the Toolbox resources support them?
Questions?

Contact:
Compass@la.gov
or visit
http://www.louisianabelieves.com/teaching/compass