CETE’s Formative-Assessment Tools for the CCSS

Lauren Adams
Alicia Stoltenberg
Today’s Focus

- Formative assessment as a process
- CETE’s CCSS formative tools
  - Math resources
  - ELA resources
- CETE’s development process
- Formative assessment in your classroom
Balanced Systems of Assessment

- **Formative** - used frequently to provide additional information about student mastery of specific standards

- **Interim** - given up to 3 times a year to provide information about student needs in order to adjust instructional programs

- **Summative** - administered once a year to provide information for state and federal evaluation of the progress of Kansas students
## Balanced Systems of Assessment

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Context</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor and improve learning</td>
<td>Classroom - teachers, students</td>
<td>Formative</td>
</tr>
<tr>
<td>Evaluate instructional programs</td>
<td>Grade-level teacher teams/PLCs</td>
<td>Interim</td>
</tr>
<tr>
<td>Inform policy/judge institutional effectiveness</td>
<td>Building/district</td>
<td>Summative</td>
</tr>
</tbody>
</table>
Tiers of Assessment

- Formative classroom (minute-by-minute, integrated into lesson)
- Interim (instructional, evaluative, predictive)
- Summative

Perie, Marion, & Gong (2009)
Assessment Relationships

More Large Scale

INTERIM/BENCHMARK Assessments

More Formative Purpose

Classroom FORMATIVE ASSESSMENT Strategies

More Summative Purpose

Large-scale ACCOUNTABILITY Assessments

(School, District, State, National, International)

GRADING Classroom Summative Assessments, Report Card Grades

More Classroom Focused

Brookhart, 2011
Formative-Assessment
A Process - NOT a Test

- Occurs during - as part of - instructional activities
- To evaluate student knowledge, skills, and abilities (KSAs)
- To inform students about their progress - not necessarily for grading purposes
- To inform instructional decisions and immediate adjustments to the learning environment

“Formative assessment is a planned process in which teachers or students use assessment-elicited evidence to improve what they’re doing” (Popham, 2011, p. 2).
The Formative-Assessment Process

1. Select instructional goal
2. Teach
3. Evaluate
4. Provide feedback
5. Adjust instruction
Alignment

Curricular Standards

Instruction

Standards influence instruction and assessment

Instruction is informed by assessment results

Assessment follows instruction

Assessment
CETE receives $1.75 million grant to aid test accessibility for students with vision and motor disabilities
Monday, 8 October 2012 9:23 CDT

LAWRENCE – The power of technology continues to alter the landscape of K-12 student testing, but without careful planning some students might have less access to its benefits than others.

Read more...

Lawrence students working with KU in development of assessment system
Friday, 24 August 2012 14:28 CDT

Work is under way to see how students with significant cognitive disabilities interact with the computer assessment system being developed for them by the Center for Educational Testing and Evaluation (CETE) at the University of Kansas.

Read more...

CETE seeks co-director/faculty member to join team
Thursday, 9 August 2012 10:11 CDT

The Center for Educational Testing and Evaluation is accepting applications for a co-director.

Read more...
CCSS Formative Assessments

Several formative assessment tools will be available this year. These tools target the concepts and skills in the Common Core State Standards (CCSS) for Mathematics and English Language Arts. Although these tools provide examples of test items that target the CCSS, they should not be used to make assumptions about any items that may appear on future summative assessments since little information exists describing the summative assessments currently being developed by the SMARTER Balanced Assessment Consortium.

For more information on the formative assessment tools available, click on the subject below.

- Mathematics
- English Language Arts
Understanding the Formative Tools for Math

At present, there are 16 assessments available. These assessments target skills found in the Common Core State Standards for Mathematics (CCSSM) in grades 3 through 8. In some cases, the grade placement of concepts and skills in the CCSSM varies from that of the 2003 Kansas Standards. Therefore, it may be appropriate to administer these assessments to students at other grade levels than those indicated for assessment. As the classroom teacher, you are encouraged to preview all of the available resources and decide what will meet your needs and the needs of your students.

Use the links below to access information about the formative tools.

- How do I know what's available?
- How should I use the formative?
- What other resources are available?
- How can I use the formative tools with all students?
TestBuilder

- TestBuilder teacher account required
- To request a teacher account, contact your building TestBuilder administrator
## Existing Tests

You can copy and modify existing tests. First, refine your search results by selecting a subject or grade.

Select "Add to My Tests" to place a copy of the desired test in [My Tests](#), where you can then edit your copy.

### Search

- **Search by keyword:**

### Limit Subject To:

- Writing
- Alternative Assessment
- Language Usage
- ELA Common Core

### Limit Grade To:

<table>
<thead>
<tr>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

*Use ctrl key to select multiple grades or subjects*

### Results

<table>
<thead>
<tr>
<th>Name</th>
<th>Subject</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attract Wild Birds_4</td>
<td>ELA Common Core</td>
<td>4</td>
</tr>
<tr>
<td>The Land of Nod_4</td>
<td>ELA Common Core</td>
<td>4</td>
</tr>
<tr>
<td>How to Wash a Car_4</td>
<td>ELA Common Core</td>
<td>4</td>
</tr>
<tr>
<td>Road through Forest_4</td>
<td>ELA Common Core</td>
<td>4</td>
</tr>
</tbody>
</table>

Results: [1-4]
Math Formative Tools

- What’s currently available:
  - 16 assessments targeting the CCSSM
  - ≥2 per grade through 8th grade
## Math Formative Tools

<table>
<thead>
<tr>
<th>Target Grade</th>
<th>Assessment Name</th>
<th>Applicable Grades Based on 2003 KS Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Using the Four Operations Within 100</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>Operations with Multiplication and Division</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Patterns Defined by a Rule</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Using the Four Operations with Money Problems</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Solve Problems by Graphing Points</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Unit Conversion Problems</td>
<td></td>
</tr>
<tr>
<td>Target Grade</td>
<td>Assessment Name</td>
<td>Applicable Grades Based on 2003 KS Standards</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Ratio and Rate Reasoning</td>
<td>X   X   X   X</td>
</tr>
<tr>
<td>6</td>
<td>Area of Triangles and Other Shapes</td>
<td>X   X   X   X   X</td>
</tr>
<tr>
<td>6</td>
<td>Statistics: Frequency, Mean, and Median</td>
<td>X   X   X   X</td>
</tr>
<tr>
<td>6</td>
<td>Modeling Problems with Expressions and Equations</td>
<td>X   X   X   X   X   X</td>
</tr>
<tr>
<td>7</td>
<td>Outcome Probability</td>
<td>X   X   X   X   X</td>
</tr>
<tr>
<td>7</td>
<td>Equation and Inequality Applications</td>
<td>X   X   X</td>
</tr>
<tr>
<td>7</td>
<td>Foundations for Slope</td>
<td>X   X   X</td>
</tr>
<tr>
<td>8</td>
<td>Using the Pythagorean Theorem</td>
<td>X   X</td>
</tr>
<tr>
<td>8</td>
<td>Graphs and Equations</td>
<td>X   X</td>
</tr>
<tr>
<td>8</td>
<td>Foundations for Slope</td>
<td>X   X   X</td>
</tr>
</tbody>
</table>
Math Formative Tools

- More in development!
  - ≥2 per grade through HS
  - Available in January
ELA Formative Tools - Plan

- Provide resources for teachers to use in their classrooms as they implement the CCSS
  - Items/tasks that target CCSS in RL, RI, and L
  - Items/tasks that target SBAC Claim 2 (writing) item specs
  - Activities and suggestions for other strands
    - E.g., presentations for SL
ELA Formative Tools - Development

- 4 texts per grade
  - 2 RL (one poem, one story) and 2 RI

- Item Types
  - Multiple-choice (MC) items
  - Constructed-response (CR) tasks
  - Activities/discussion ideas
  - Claim 2 (writing) tasks - correcting errors, reordering sentences, writing a concluding sentence...
ELA Formative Tools - Organization

- www.cete.us
  - “Kansas Assessment Program”
  - “CCSS Formative Assessments”

- PDF for each text
  - Preparation notes
  - Text and MC items available in the formative tool
  - Preview the CR tasks and other tasks
    - Decide which CCSS to target
    - Copy, paste, organize
    - Print for students
ELA Formative Tools - Available Resources

- 4 sets per grade for grades 3-8
  - 2 RL (one poem, one story) and 2 RI
- 8 HS sets will be released this month
- 4 sets per grade for grades 3-HS will be released this spring
- Additional sets will be released next fall
Building on Successes

- Over 30-year partnership between KSDE and KU’s Center for Educational Testing and Evaluation (CETE)

- KSDE and CETE work together to develop instruments used in the Kansas balanced system of assessments
  - Huge cost savings to Kansas
  - State tax dollars remain in Kansas
  - Increased involvement of Kansas educators
  - Faster reaction time to needs of KSDE, Kansas educators, and Kansas students
Test Development Process

Statement
• Content to be assessed
• Purpose of assessment

Specifications
• Test
• Individual items

Item Development
• Meet the needs of the assessment
• Internal review

External Review
• Content review
• Bias/sensitivity review

Administration

Equating
• Achievement standards have consistent meaning

Item Selection
• Item content
• Statistical properties

Field Testing
• Statistics gathered

Quality Checks
• Verify scaling and equating

Reporting
In Your Classroom...

- How have you used formative assessment in your classroom?

- What types of formative assessment do you use that are NOT tests?

- What other types of formative assessment tools could be developed that would be useful in your classroom?
Questions?
Thank You!

Lauren Adams
laurenadams@ku.edu

Alicia Stoltenberg
aliciastoltenberg@ku.edu