Effective Use of Kansas Formative, Interim, and Summative Assessments to Support Student Learning

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A single assessment may be used as a summative measure by one teacher aiming to make classifications or assign grades, and as a formative tool by another teacher aiming to identify student understandings and misconceptions to guide instructional decisions. Consider an interview for a moment. When a person conducts an interview for the purpose of hiring a person for a job, it is somewhat summative in nature. The candidate will either be hired or not based on the assessment made during the interview.

Now consider the first meeting of a student and an academic tutor. During this meeting, the tutor tries to glean information about the student’s existing knowledge and to identify sources of misconceptions. The tutor then tailors the remainder of the session to help the student correct his/her understanding by analyzing problems and situations together. The aim is for the student to reconstruct his/her knowledge by connecting the successful learning situation and the academic content being discussed to his/her existing relevant knowledge. This is the essence of formative assessment: to diagnose, treat, and improve achievement.
Formative Assessment

- Assessment for learning
- Takes place during learning
- To gather information
- Many forms may be effective
- Feedback is essential
- Ongoing, responsive, and dynamic

There is little agreement in the literature about what clearly defines formative assessment. However, there are common elements present in a large number of texts and journal articles.

Assessment for learning
Takes place during the learning process.
To gather information to be used to adjust or modify teaching and improve meaningful learning
Many forms other than responses to test questions may be effective, for example:
  - Observations
  - Interviews/conversations
  - Homework assignments
  - Classroom quizzes and tests
Useful feedback to the student is essential.
Formative assessment is ongoing and dynamic and should provide students with successful learning experiences.
Student success with the learning goal is an important piece of quality formative assessment.
Educator action plans must be transformed into teaching plans, which must reflect changes in teaching.
First bullet: mention that these descriptions are useful to students and teachers for guiding future learning.

To describe a student’s strengths and weaknesses and help the student understand what he doesn’t know
To offer students opportunities to practice what they are learning
To estimate a group’s existing knowledge prior to instruction
To provide students with an advance organizer of upcoming learning goals
To gauge understanding during instruction
To identify misconceptions following instruction
To evaluate the effectiveness of instruction
NOT to produce grades or scores
Teacher-made assessments may be formative if their results are used to guide future opportunities for students to learn and demonstrate understanding. Remedial instruction must be qualitatively different from what occurred the first time around. Common barriers include:

- Time constraints
  Teachers must plan and allow for the time it takes to revisit material in a different way and to allow students to demonstrate their learning after this later instruction.
- Requirements to fill the gradebook
- Fairness
  Should an A the first time an assessment is given be equal to an A the second time an assessment is given?
While feedback is arguably the most important feature of effective formative assessment, this step is often neglected.

Effective feedback is an essential feature of formative assessment. Feedback should provide cues or reinforcement to learners. Feedback should describe and help to reduce the gap between existing and desired levels of understanding. Feedback is more effective when it provides information about correct rather than incorrect responses and when it cites improved understanding. Grading is not the same as giving useful feedback. Personal feedback and extrinsic awards/punishments are NOT effective for learning as these do not relate to content or cognitive processing.
Feedback should answer:

Where am I going?
Clear, shared learning goals

How am I doing along the way?
Feedback should address progress made so far and future directions needed to achieve learning goals.

Where to next?
Opportunities for increased content knowledge, better processing, or advanced connections among concepts
Types of Feedback

- **Self-regulation**
  - About a task – right, wrong, how to improve the response
  - Pertaining to a process – how to improve efficiency and accuracy of process used to form responses
  - Regarding student self-regulation – help learners examine their own work with some direction about what to look for and how to improve their responses

- **Task**
  - When students use feedback to self-assess and set goals, they take or increase ownership of their success.
Formative Assessment in Kansas

- Selected response
- Select or create items or pre-built tests
- Task feedback

There are a limited number of selected response items that are similar to those used on operational interim and summative assessments available in KCA.

Student experience with these tools reduces surprise and anxiety on summative tests.

Teachers and administrators with appropriate access can select or create questions and/or pre-built tests to offer their students throughout the year.

Feedback provided in Testbuilder is limited to task feedback.

Feedback is represented in an student by item response matrix.

No process feedback.

No immediate, useful feedback to students.
Assessment of and for learning
- Takes place periodically
- Measures student progress
- Predicts achievement
- To gather information
- “Benchmark” assessment

Assessment of and for learning
Takes place periodically over the course of instruction
To measure student progress relative to a set of learning criteria (i.e. KS curricular standards)
To predict achievement on summative measures aligned to the same criteria
To gather information that may be used to guide future instruction to close gaps between current performance levels and target proficiency levels
Sometimes referred to as “benchmark” assessment
Interim Assessment Tips

- Not part of staff evaluation
- Use responsibly
- Buy-in is essential
- Teachers must feel safe
- Not automatically formative

Interim assessment results should not be part of staff evaluation nor shared with anyone who might use these data inappropriately.

Teacher buy-in is essential.

Teachers must feel safe in reporting early results and collaborating to seek out solutions that may improve their instruction and student learning.

A common misconception is that interim assessments are automatically formative.

Recall, an assessment is formative if its results are used to modify future teaching and learning. In this way interim assessments may be formative as well when teachers use their results to modify what they do with students.
Kansas Mathematics Interim Assessment

- Available beginning August 2010
- Grades 3 – 8

New tool available beginning August 2010

Kansas Mathematics Interim Assessment

Grades 3 – 8

Testlet adaptive design

Three test windows
- August 15 – October 15, 2010
- October 16 – December 30, 2010
- January 1 – February 28, 2010
The Kansas Mathematics Interim Assessment is testlet adaptive.

Each student will receive three testlets in a single testing session.

The content balance over the three testlets approximates the content balance of the summative assessment at a given grade level.

The first testlet includes one item for each tested indicator at a given grade level.

A student’s score on the first testlet determines the selection of that student’s second testlet. Likewise, the student’s score on the second testlet determines the selection of that student’s third testlet.
Scores from interim assessments will be on the same scale as score from the summative assessment.

Teacher reports will be interactive.

Reports will be available electronically on demand following testing sessions.

Some information in teacher, school, and district reports will not be available until after each administration window closes.

Interim assessment reports in 2011-2012 will offer predicted summative test scores based on data collected in 2010-2011.
This chart would appear on the welcome screen for teacher reports following the third testing session. The default score reports will include scores on all items on the interim assessments. Teachers will be able to choose to view a report that includes scores from only the items aligned to the indicators they have taught to date.
Summative Assessment

- Assessment of learning
- Takes place at the completion of a unit of instruction
- To evaluate student achievement
- To measure student, school, or program success.
- To make educational decisions

Assessment of learning

Takes place at the completion of a unit of instruction

To evaluate student achievement relative to a specific set of learning criteria (i.e. KS curricular standards)

To measure student, school, or program success.

Scores may be used in conjunction with additional information to make educational decisions such as course placement, retention, or promotion.
There is an additional file available to print on the backside of parent letters that offers information about how to read the score report letter.
2010 Score Report

### Percent of Students in State, District, and School by Performance Category

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>% State</th>
<th>% District</th>
<th>% School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced (71% or greater)</td>
<td>40</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Proficient (40% to less than 71%)</td>
<td>40</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Basic (20% to less than 40%)</td>
<td>20</td>
<td>18</td>
<td>18</td>
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<tr>
<td>Below Basic (20% or less)</td>
<td>20</td>
<td>16</td>
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*Note: The total may not equal 100%.*
### 2010 Score Report

#### Kansas Tested Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent of Students Exceeding Expectations (%)</th>
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#### Percent of Students in State, District, and School by Performance Category

<table>
<thead>
<tr>
<th>Category</th>
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*Note: The image contains a table and a graph that are not transcribed in the text.*
Questions?

Send your questions to me at:

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References


