

Kentucky's Next Generation Science Assessment System

The Kentucky Department of Education recently awarded a contract to WestEd to serve as a 'thinking partner' for the design of a new Next Generation Science Assessment System for our state. Specifically, WestEd is tasked with working with Kentucky to create an assessment framework for KCAS Science, along with item and test specifications that ensure congruence to the intent of the new standards.

Senate Bill 1 (2009) requires that a "balanced assessment system" is created across schools, districts and the state to support student learning of new standards that emphasize critical thinking within the content areas. A balanced assessment system* that meets the needs of all stakeholders involves:

- Considering the student as the most influential user of assessment information;
- Ensuring on-going, accurate classroom assessments FOR and OF learning;
- Developing interim, short-cycle, or benchmark assessments (also sometimes called "common" assessments)—not for accountability purposes;
- Administering annual accountability testing.

(*adapted from ETS Assessment Training Institute "Leading Professional Development" Workshop, 2009)

To that end, Kentucky is working to develop a system that is informed by and aligns to what happens in classrooms—since that is where the student is actually learning and growing in their attainment of the standards. The conception of the key system components originates from the National Academies of Science's Board on Testing and Assessment's report: *Developing Assessments for the Next Generation Science Standards* (http://sites.nationalacademies.org/DBASSE/BOTA/DBASSE_090259). The desire is to create specifications to inform classroom and common, or 'through-course' assessments (assessments FOR learning) that are created wholly to provide actionable information for students and teachers as science teaching and learning is happening, and that would not be used for state accountability. Additionally, specifications will be developed for summative assessments (assessments OF learning) that align to and complement the classroom and through-course and that would be used for accountability. The consistency between all components of the 'balanced' system would ensure that teachers and students alike would be clear on the expectations for demonstrating attainment of the standards—and that everyday teaching and learning would be all the necessary 'test prep' needed.

WestEd specialists in both psychometrics and science will be visiting—either in person or electronically—the Kentucky Science Teacher Leadership Networks in the spring of 2015 to hear from teacher leaders what the most important considerations and expectations are for the framework and specifications. Their ideas and priorities will help shape the final system design and specifications. From there, a new search for an "operational vendor" that will assemble the new through-course and summative assessments following the framework and specifications will begin (likely, early this fall).

To summarize:

1. Work is taking place to define a framework for a balanced science assessment system.

2. WestEd has been selected to be the ‘thinking partner’ to deliver the framework and item/test specifications based on KY educator input.
3. WestEd is NOT creating the assessments themselves—just the specifications.
4. A new vendor will be sought to create operational assessments that meet the specifications developed.
5. KY teachers’ voices matter and are being sought to inform the specifications.
6. It is the intent to broaden the discussion of science assessments to include the high school model, but we are starting with the K-8 first. With that in mind:
 - The focus is on building a framework for a *system* of assessment that begins in the classroom, focusing on generating information that enables teachers to adjust instruction and students to track their learning and focus on growth and improvement—for all levels/courses.
 - The process of identifying defensible evidence of student understanding goes beyond the bounds of any particular assessment.
 - The information the vendor will provide can be extrapolated to all science levels/courses.