

# Smarter Balanced Assessment Consortium

Theory of Action  
An excerpt from the Smarter Balanced  
Race to the Top Application

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The Smarter Balanced Assessment Consortium (Smarter Balanced) supports the development and implementation of learning and assessment systems to radically reshape the education enterprise in participating States in order to improve student outcomes. Smarter Balanced believes that the current “drop from the sky” approaches to educational testing are ineffective for too many teachers and students. Through expanded use of technology and targeted professional development, the Consortium’s Theory of Action calls for full integration of the learning and assessment systems, leading to more informed decision-making and higher-quality instruction, and ultimately to increased numbers of students who are well prepared for college and careers.

The overarching goal of Smarter Balanced is ***to ensure that all students leave high school prepared for postsecondary success in college or a career through increased student learning and improved teaching***. Our approach is rooted in the belief that stronger learning will result from high-quality assessments that support ongoing improvements in instruction and learning, and that are educative for students, parents, teachers, school administrators, members of the public, and policymakers. Meeting this goal will require the reform and coordination of many elements across the education system, including, but not limited to, a quality assessment system that strategically “balances” summative, interim, and formative components (Darling-Hammond & Pecheone, 2010); provides valid measurement across the full range of common rigorous academic standards, including assessment of deep disciplinary understanding and higher-order thinking skills that are increasingly demanded by a knowledge-based economy; and by the establishment of clear, internationally benchmarked performance expectations. Other elements that are outside the Consortium’s direct scope of work, but not outside its influence, are comprehensive pre-service and in-service professional development and focused and valid systems of accountability.

### Seven Principles Undergirding the Theory of Action

Our assessment proposal is shaped by a set of seven principles shared by both assessment systems in high-achieving nations and a number of high-achieving States in the U.S.

- 1. Assessments are grounded in a thoughtful, standards-based curriculum and are managed as part of an integrated system** of standards, curriculum, assessment, instruction, and teacher development. Curriculum and assessments are organized around a well-defined set of learning progressions along multiple dimensions within subject areas. Formative and interim/benchmark assessments and instructional supports are conceptualized in tandem with summative assessments—all of them linked to the standards and supported by a unified technology platform.
- 2. Assessments produce evidence of student performance** on challenging tasks that evaluate the Common Core State Standards (CCSS). Instruction and assessments seek to teach and evaluate knowledge and skills that generalize and can transfer to higher education and multiple work domains. They emphasize deep knowledge of core concepts and ideas within and across the disciplines—along with analysis, synthesis, problem solving, communication, and critical thinking—thereby requiring a focus on complex performances as well as on specific concepts, facts, and skills.

3. **Teachers are integrally involved in the development and scoring of assessments.** While many assessment components are efficiently scored with computer assistance, teachers must also be involved in the formative and summative assessment systems so that they deeply understand and can teach in a manner that is consistent with the full intent of the standards, while becoming more skilled in their own assessment practices.
4. **The development and implementation of the assessment system is a State-led effort with a transparent and inclusive governance structure.** Since December 2009, Smarter Balanced has hosted weekly conference calls and several face-to-face meetings open to all States interested in establishing a Consortium of States for the development of assessments aligned to the CCSS. Those activities have resulted in a governance structure that has established a consensus decision-making model and clear leadership roles. Each State's commitment to our collaborative process and products will facilitate the development of our complex system and signal ongoing support for its implementation.
5. **Assessments are structured to continuously improve teaching and learning.** Assessment as, of, and for learning is designed to develop understanding of what learning standards are, what high-quality work looks like, what growth is occurring, and what is needed for student learning.
6. **Assessment, reporting, and accountability systems provide useful information on multiple measures that is educative for all stakeholders.** Reporting of assessment results is timely and meaningful—offering specific information about areas of performance so that teachers can follow up with targeted instruction, students can better target their own efforts, and administrators and policymakers can more fully understand what students know and can do, in order to guide curriculum and professional development decisions.
7. **Design and implementation strategies adhere to established professional standards.** The development of an integrated, balanced assessment system is an enormous undertaking, requiring commitment to established quality standards in order for the system to be credible, fair, and technically sound. Smarter Balanced is committed to developing an assessment system that meets all Critical Elements required by USED Peer Review, relying heavily on the Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999) as its core resource for quality design. Other key sources of professional standards that will guide Smarter Balanced work include a reasoning-from-evidence approach (e.g., see NRC, 2001; Mislevy, Almond, & Lukas, 2004); Operational Best Practices in Large Scale Assessment (ATP, CCSSO, in press); and the ANSI-endorsed Student Evaluation Standards, Program Evaluation Standards, and Personnel Evaluation Standards (JCSEE, 2002, 1994, 2008, respectively).

### Components of the Theory of Action

Presented below are the components of the Consortium's Theory of Action, including connections to other system components, the results to be produced, and some of the key related Consortium activities. A pictorial schematic of the Smarter Balanced Theory of Action is found in Appendix A2-1. While this figure presents the Theory of Action in a somewhat linear fashion, this is simply a limitation of representing a complex system in two dimensions

and on a single page. The actual Theory of Action is much more recursive and multidimensional than graphically depicted.

**Consortium and State policies and practices support high expectations and increased learning opportunities for students.**

A major working assumption of the Consortium is that assessment reform must operate within the context of State policies and practices that can either support or hinder realization of the overall goal to have students graduate from high school as college- and career-ready. Thus, Smarter Balanced has committed to creating a policy environment that can support the innovative systems described in the design section of this proposal. Supportive policies would include the development of accountability systems that incentivize the right behaviors for administrators and teachers, and avoid inadvertently rewarding behaviors that would run counter to the learning goals. Another example is policy for provision of ongoing professional development structures and support for teachers.

**The assessment system is aligned to a common set of State standards that clearly specify college, career, and grade-level expectations.**

A State policy that is fundamental to the Smarter Balanced Theory of Action is adoption of the Common Core State Standards (CCSS), which clearly specify college and career expectations as well as the knowledge and skills required at each grade level to meaningfully articulate progress toward these end-of-high-school expectations. These “fewer, higher, and deeper” standards—influenced by findings that high-achieving countries typically teach fewer topics more deeply—will serve as the basis for the comprehensive assessment system. And while it is critical that the assessment system validly reflects these standards, Smarter Balanced must interpret or translate these standards before they can be used effectively for assessment or instruction. Specific steps include the following.

1. Ensure that each member State adopts the CCSS by December 31, 2011.
2. Translate the standards into content/curricular frameworks, test maps, and item/performance event specifications to provide assessment specificity and to clarify the connections between instructional processes and assessment outcomes.

**Smarter Balanced policies and standards are effectively communicated to districts and schools.**

Enacting policies and having standards is not enough. A major lesson learned by Smarter Balanced member States is that clear and timely communication of policies and practices is essential for successful implementation of a new system. Effective communication is critical in the short term to signal change, and over the longer term to implement change. Specific steps include the following:

1. Develop a multimedia communications plan that is implemented by each member State to educate stakeholders about key aspects of college and career expectations.
2. Develop score reports that clearly communicate about the assessment system and the results to key stakeholder groups.

**Teachers are provided with curriculum, instructional materials, rich professional development, and other supports and resources to effectively instruct students on the standards.**

While effective communication with teachers is essential, the Smarter Balanced model calls for a fuller level of teacher engagement in an integrated learning and assessment system, which requires that teachers receive adequate supports and resources. This system component, central to the design of the Smarter Balanced system, encompasses many different teacher support features. Specific aspects include

1. Model curriculum and instructional modules that are aligned with the CCSS.
2. Training modules that help teachers focus their instruction on the CCSS and develop teaching practices that support more in-depth learning.
3. Training of teachers to use formative assessment tools and interim/benchmark assessments as well as to interpret results and use those results to determine next steps in instruction.
4. Teacher-moderated scoring of performance events as a professional development vehicle to enhance teacher capacity to evaluate student work aligned to the standards.
5. Online interpretable score reports at the student and classroom level that clearly show strengths and weaknesses and can be tailored to fit individual needs and circumstances.

**Technology provides increased access and opportunities for students to fully engage in the learning and assessment systems and supports the design, delivery, scoring, and reporting of the assessment system.**

Innovative and efficient use of technology is the hallmark of the Smarter Balanced model. The Smarter Balanced Theory of Action posits that technology solutions for test delivery will provide students with increased access to the assessment and will yield more accurate measurement of their acquisition of knowledge and skills. For example, use of computer adaptive testing (CAT) methodologies will ensure that students across the full range of performance have an assessment experience that presents them with items that are best suited to their skill level. Average-, very low-, and very high-performing students will be more likely to stay engaged in the assessment because they will be responding to questions targeted to their skill level.

The computer delivery system broadens the availability of the accommodations while establishing a less restrictive testing environment for students with special needs. The system will also support several formalized accommodations. For example, text-to-speech and aural native language translations can be supported if students are tested in isolation, or if they have access to headphones. Refreshable Braille can also be supported with online tests.

Just as technology will support student access and engagement, it will also lead to more valid and timely reporting of assessment results, and lead to efficiencies and enhancements for professional development and resource tools. Specifically, Smarter Balanced will

1. Ensure that all students are provided with the technology needed for all aspects of the Smarter Balanced assessment system (summative, interim/benchmark, and formative).
2. Support research on how best to increase access for all students through the use of technology.
3. Use technology to efficiently deliver training programs, resources, score reports, data, etc., including interactive Web-based social networks designed for teacher use in the development and dissemination of effective curriculum and instructional practices.
4. Create innovative and real-world item types that rely on technology platforms.
5. Use adaptive item selection engines, drawing on a broad item pool, to ensure that accurate measures of student achievement are possible across a wide performance continuum without undue burden.
6. Establish accommodation protocols that capitalize on technological capabilities to support broader access to assessments for all students, including those most at risk.
7. Standardize member State accommodation policies through a coordinated Enhanced Assessment Grant.

**A high-quality summative assessment system establishes high expectations and provides relevant information on achievement and growth to teachers, students, and others.**

Assessments must be carefully structured to improve teaching and learning. This means establishing summative assessments that reflect the challenging CCSS content, emphasizing not just students' "knowing," but also "doing." Smarter Balanced envisions a summative assessment system composed of interactive selected-response and constructed-response items and simulations as well as teacher-developed performance events that measure the full range of student abilities on the CCSS. The incorporation of CAT is based on member States' positive experiences with this methodology (e.g., Oregon) and the many benefits it affords, such as precision of measurement and timely results (Kosty, McBride, Poggio, Wise, & Way, 2006; Lilley, Barker, & Britton, 2004; Rabinowitz, 2005). The summative assessment will accomplish the following:

1. Signal high expectations to students, parents, teachers, administrators, and policymakers.
2. Provide efficient, reliable, and valid information across the full range of achievement.
3. Engage IHEs at the high school level to ensure that assessments truly reflect a measure of readiness for college and careers.
4. Provide explicit measures of student progress toward college- and career-readiness through growth models and criterion-validity studies.
5. Promote policy alignment by establishing internationally benchmarked achievement standards that are common across Consortium States and that are comparable across multiple consortia.

**Interim/benchmark (I/B) assessments and formative tools and strategies are integrated with the summative assessments to provide instructionally useful information to teachers, students, and administrators.**

While a rigorous summative assessment is essential, Smarter Balanced believes that it is insufficient to drive positive change in teaching and learning. Informed by the recent experiences in England and Hong Kong, Smarter Balanced posits that I/B and formative assessments are the other necessary assessment ingredients to drive teaching and learning (Darling-Hammond & Pechone, 2010). As such, I/B and formative assessments will be developed and implemented directly under the purview of the Consortium—not simply adopted from external sources. Grounded in cognitive development theory about how learning progresses across grades and competence develops over time (NRC, 2001; Pellegrino, 2006; Stiggins, 2002), the assessments will (a) work in concert with the summative assessment, (b) allow for more innovative and fine-grained measurement of student progress toward the CCSS (Shepard, Hammerness, Darling-Hammond, & Rust, 2005), and (c) provide diagnostic information that can help tailor instruction and guide students in their own learning efforts. Besides its close connection to the summative component, this component will also operate in tandem with the teacher resources and supports component as well as the teacher engagement component (see below). The main features that Smarter Balanced will incorporate into its comprehensive system include

1. I/B assessments on the same scale as the summative assessments to measure within-year student achievement and provide teachers and students with information on the degree to which students are on track to succeeding on the summative assessments.
2. Interpretative guides, using the publicly released I/B assessment items and performance events to illustrate how Smarter Balanced assessments are manifestations of the CCSS.
3. Formative tools that teachers can use throughout the year to better understand where students are in their learning and determine any misconceptions, allowing for quick adjustment to instruction as well as differentiated instruction.

**Teachers are engaged in the design, development, and scoring of assessment items and in the reporting of results.**

The Smarter Balanced model envisages an integral role for teachers in an integrated learning and assessment system. This means teachers must be meaningfully engaged in all aspects of assessment. To that end, the Smarter Balanced model incorporates the following features:

1. Work with teachers and policy stakeholders to develop test maps that assess the full range of the CCSS and that articulate within and across grade levels.
2. Involve teachers in specifying, writing, reviewing, and range finding test items/performance events.
3. Use teacher-moderated scoring of performance events as a professional development vehicle to enhance teacher capacity to evaluate student work aligned to the standards.

**Teachers, students, and administrators use information from instructionally useful assessments to improve teaching and learning.**

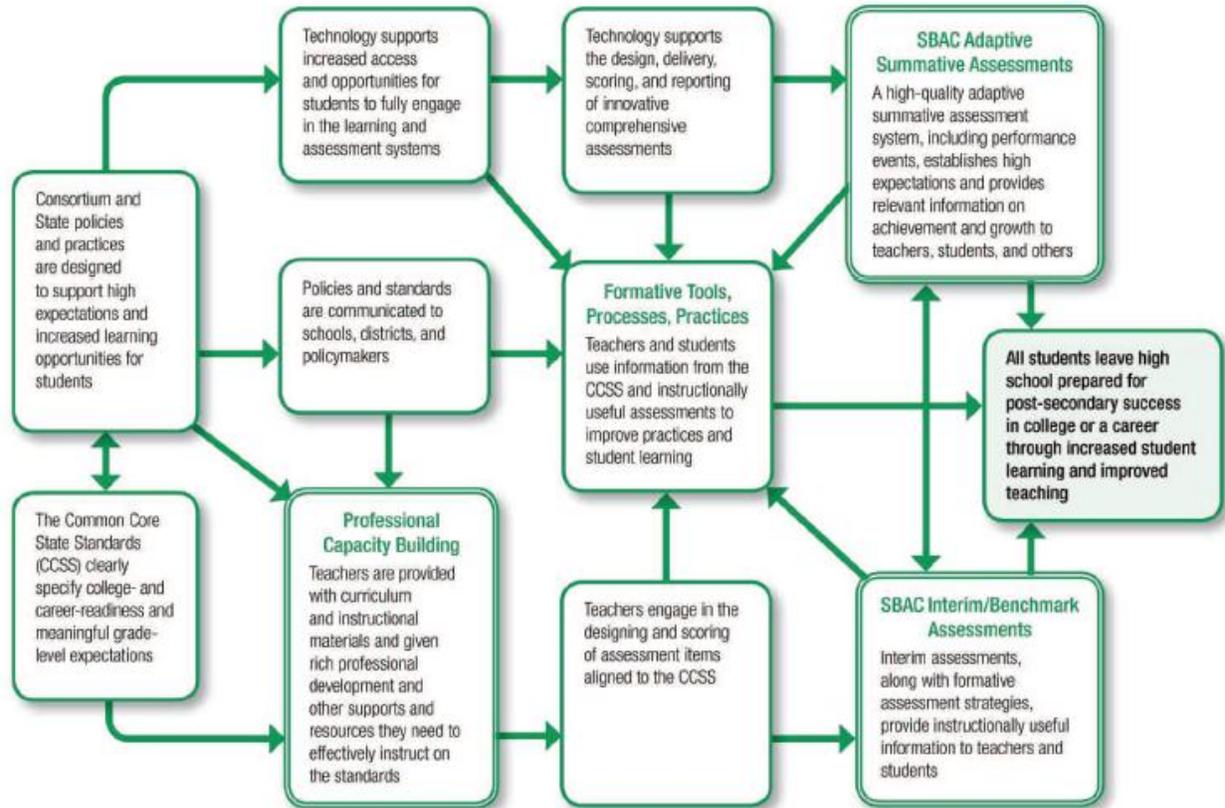
Information from assessment results must be delivered in ways that are instructionally useful for schools and teachers as well as meaningful and actionable for students (Popham, 2006). Making optimal use of technology, Smarter Balanced will

1. Fully involve teachers (and other end-users) in designing different score reports and web-enabled tools and services to maximize their communication value and usefulness.
2. Provide interactive reports and resources so that teachers fully understand performance for each student and the class as a whole.
3. Allow students to more fully engage in the learning process through ongoing interim/benchmark assessments that can be self-administered and reports that allow students to compare where they are to where they need to be.

In summary, the proposed Smarter Balanced learning and assessment system is grounded in a sound Theory of Action—taking advantage of current research and lessons from current practice—and incorporates a new generation of technology tools, innovative assessments, and state-of-the-art classroom support mechanisms to improve teacher and student capacity to meet the challenges in ensuring that all students are college- and career-ready.

**SMARTER**  
Balanced Assessment Consortium

**Overview of the Theory of Action**



The Smarter Balanced Assessment Consortium brings together states to create a common, innovative assessment system for Mathematics and English Language Arts that is aligned with the Common Core State Standards and helps prepare students for college and careers. The Consortium involves educators, researchers, policymakers, and community groups in a transparent and consensus-driven process to help all students thrive in a knowledge-driven global economy. The Consortium’s projects are funded through a four-year, \$175 million grant from the U.S. Department of Education, comprising 99% of activity resources, with the remaining support provided through generous contributions of charitable foundations. Membership is open to any interested U.S. state. For more information, please visit [SmarterBalanced.org](http://SmarterBalanced.org).