On June 2, 2010, the Council of Chief State School Officers and the National Governors Association Center for Best Practices released the final version of the Common Core State Standards (CCSS). These K-12 content standards define the knowledge and skills students should acquire to be ready for success in entry-level, credit-bearing college coursework and in workforce training or certification programs.

The Common Core State Standards Initiative (CCSSI) is an unprecedented state-led effort, both in design and accomplishment. Committees formed to develop the standards included experts in assessment, curriculum design, cognitive development, early childhood, early numeracy, child development, English-language acquisition and elementary, middle, and postsecondary education. These work groups undertook an extensive process to ensure that the CCSS are aligned with college and work expectations; built upon the strengths and lessons of current state standards; informed by other top performing countries; and grounded in research and evidence. In addition to culling the best expertise available, the CCSS work groups also took great care to design standards that are clear and consistent, include rigorous content, and require the application of knowledge through high-order skills.

Drafts of the CCSS were vetted by the initiative’s Feedback Groups and Validation Committee and were subjected to considerable state and public scrutiny. The CCSS work groups revised the standards several times in response to feedback from state departments of education and more than 10,000 individual online surveys. During the development of the CCSS, many state departments of education conducted “crosswalk comparisons” between the draft CCSS and their own content standards. These comparisons helped states generate feedback on content and structure and allowed education leaders within the states to develop familiarity with the CCSS.

Forty-eight states, two territories, and the District of Columbia originally signed on to the CCSSI, which quickly attracted the attention of the federal government. Impressed by this state-led effort, the U.S. Department of Education made adoption and implementation of shared, high-quality standards a key element of the competitive Race to the Top Grant Program. Additionally, the Race to the Top Assessment Grant Program is encouraging states to collectively develop assessment systems aligned with shared standards. These grant opportunities have generated a new financial incentive for state leaders to plan for adoption of the CCSS. Race to the Top also requires individual states to articulate a comprehensive plan for education reform, and many states engaged in exhaustive planning processes to prepare their applications.

As state leaders set out to develop comprehensive education plans, those initial crosswalk comparisons that states conducted provided a valuable glimpse at the depth of knowledge and level of rigor that are required by the CCSS. Standards-based reform is based on the notion that the primary elements of an educational system—curriculum, instruction, teacher preparation, professional development, and assessment—must be aligned with content and
performance standards to support and guide teaching and learning. However, alignment isn’t ensured by the adoption of new standards. States and districts have faced challenges in terms of capacity and resources to align each of these essential elements with rigorous standards. The Hunt Institute-commissioned National Academies workshop series in 2008 found that there has been a wide gap between the theory and practice of standards-based education.

It is significant that adoption and implementation of the CCSS is now occurring in an environment of comprehensive planning, possible grant awards, and increased cooperation among states. Amidst fiscal strain and shrinking budgets, state leaders can draw upon these opportunities to develop education systems that support instruction and learning in ways that have not previously occurred due to limited resources.

Savvy policymakers understand that adoption of standards is merely the first step in designing an education system. These leaders are now thinking deeply about what it will take to ensure alignment with the standards and fidelity of implementation. As indicated by the many individuals who submitted feedback during development of the CCSS, educators and parents hope these new state standards will be implemented as part of a well-supported, cohesive, seamless education system. A side-by-side comparison of the state’s standards with the CCSS, though a typical first step, will not provide educators and policymakers sufficient information to establish systemic alignment. States will need to conduct a thorough review of their current systems and a deficit analysis to forecast changes that will be needed for successful implementation.

This issue of Blueprint offers an overview of the types of analyses that state leaders will need to undertake. To guide this work, state leaders will need to determine the information needed at this point, establish plans for implementation and communication to stakeholders, and ensure that these activities maximize the state’s return on investment.

**ANALYSIS THAT BUILDS AN IMPLEMENTATION PLAN**

In states where adoption of the college- and career-ready standards seems likely, questions are already being asked about implementation. Educators and leaders at the district and state levels wonder how the CCSS will be operationalized. Do teachers have the appropriate preparation and tools to help their students achieve the standards? How will progress be assessed? In these states, implementation plans are needed to ensure that all components of the system are reconsidered. Policymakers also need to acknowledge that it will take time to move toward the goals of the standards, and should communicate the types of changes and supports that will be required.

A comprehensive implementation plan is necessary in all states, regardless of whether they adopt the CCSS. Such an implementation plan will consider the needs of:

- Policymakers who adopt the standards
- Districts and school leaders who design supports for teachers
- Teachers and instructional staff who need effective preparation and professional development
- Content experts who develop curricular materials
- Psychometricians who design assessments
- Students and parents who must understand the expectations

During the design and review of an implementation plan, it is important to elicit participation from a cross section of stakeholders. Care should also be taken to identify connections in areas that overlap, such as curricular materials, teacher preparation, and professional development. This will ensure that the plan is coherent.

**Evaluate Current Alignment Processes**

If a state has undertaken periodic revision of their unique content standards, there are likely processes in place to realign the system to new or revised standards. Some aspects of alignment might be undertaken at the state level, outsourced to vendors, or left to local school districts to tackle. In many cases, the process of aligning the education system with new or revised content standards is organic in nature; individuals within the state department of education and local school districts who have roles that intersect with standards, assessments, curriculum, teacher preparation, and professional development are expected to identify and make adjustments to the system as needed.

Current alignment processes often rely on silos of activity and expertise. For example, once content standards have been adopted, it is not uncommon for a state to rely on districts and textbook developers to create curricular resources and test developers to create assessments. This means that critical conversations about instruction and the evaluation of student learning occur separately. Disjointed planning in these areas can undermine implementation, as it is actually the relationship between content standards, curriculum, and assessment that generates the power of standards-based education. The outcome of haphazard alignment between these key elements plays out at the classroom level, when teachers diligently lead students through textbooks that include too much content, and then set instruction aside for extended periods of “test prep” to get students ready for the state assessment.
Analysis of a state’s alignment processes could reveal areas in which no action is typically taken. One area of particular concern is the failure to evaluate fidelity of implementation. For example, teachers need to be observed regularly to determine their professional development needs in relationship to the content standards. Professional development programs should also be evaluated to determine whether they effectively prepare teachers to craft and deliver curriculum and instruction that is aligned with the content standards. Additionally, teacher training programs must be addressed in the implementation plan to ensure that proactive measures will be taken to align teacher recruitment and training with the requirements of the standards. These are critical elements, as research has repeatedly demonstrated that teachers are the single-most influential element in a student’s academic success.

Conducting an analysis of current alignment processes will help state leaders set the stage for an effective implementation plan that brings the right players to the table. It is important for leaders to ensure that all elements of the standards-based system — and the relationships between those elements — are being considered at the onset of the move towards the CCSS. A process analysis will also reveal opportunities for a state to capitalize on the power of shared standards. If state leaders determine that financial and staff capacity is too strained to undertake all of the necessary transition work, they could partner with other CCSS-adopting states to pool resources and tackle the work collectively.

**Analyze Requirements for Curriculum**

In previous iterations of standards-based reform, great attention has been focused on standards and assessments, but significantly less attention has been paid to the critical classroom elements in between — curriculum and instruction. Nearly 40 states provide some sort of curriculum guides for teachers of English language arts and mathematics, and 30 states offer sample lesson plans in each of these subjects. Depending on the state, actual curriculum may be designed at the state or district level. However, some states do not require the development of curriculum at all, and it is not uncommon for this work to be defined through textbook adoption. The process for selecting and adopting textbooks varies, but often ends in teachers piecing together an array of products to design and deliver instruction.

Curriculum vendors, seeing a large new market among states in the CCSSI, are likely to release an array of products that claim to be aligned with the standards. Before purchasing any of these, states and districts should first evaluate the extent to which current instructional materials (including technology-based resources) are aligned with the CCSS. As a stop-gap measure, it may be possible for states and districts to create instructional guides that adapt current materials to the requirements of the standards while improved instructional materials are being designed.

Working together, states can develop useful, open source materials that are strongly aligned with the CCSS and are designed to foster enactment of the intended curriculum. This will require deep conversations about the translation of content standards into instructional resources and practice.

Several current efforts are now paving the way for those conversations to take place. For example, the National Council of Teachers of Mathematics (NCTM) recently published a state-of-the-art account of curricular developments in *Mathematics Curriculum: Issues, Trends, and Current Directions*. In addition, research on learning progressions, particularly in the areas of mathematics and science, has advanced conversations about the ways students acquire information and skills. The Consortium for Policy Research in Education (CPRE) is engaged in a project that takes account of the progress made in learning progressions research. Finally, individuals with expertise in the development of curricular materials and learning progressions have been involved in drafting and reviewing the CCSS. From among these different sources, states have increasing access to information that can guide the creation of instructional materials.

Once requirements of the curriculum are determined and plans are established to develop appropriate materials, state leaders need to consider once again the processes used to encourage use of these resources. Remember, if no process exists to observe teachers or otherwise monitor the enactment of curriculum, the state is overlooking one of the most critical elements of an aligned, standards-based system — ensuring that students actually receive instruction that is aligned with the CCSS. Educators in 24 states have found the Surveys of Enacted Curriculum, a project of the Council of Chief State School Officers (CCSSO), to be useful in evaluating the alignment between instruction and content standards.
Analyze Requirements for Teacher Preparation and Professional Development

As in any profession, teachers need quality training to craft and deliver instruction effectively. Teachers in the U.S. are prepared in many different kinds of programs, though preparation falls into two categories. Approximately 80 percent of aspiring teachers are enrolled in “traditional” programs within institutions of higher education (IHEs), and the rest enter the profession through one of approximately 130 “alternative” routes. A recent study by the National Research Council found little definitive evidence that any particular approach to teacher preparation is more successful than others. However, past research has shown that teachers are better able to apply what they have learned when professional development programs are directly linked to the standards, curricula, and assessments that they are using in the classroom.

It is important for state leaders to consider not only the knowledge and skill base of their teaching force in relationship to the CCSS, but also the extent to which teacher preparation programs and professional development are designed to coordinate with the standards. The state department of education will need to work closely with IHEs to conduct such analyses, as schools of education house the majority of teacher preparation and professional development programs. Should states decide to band together to develop preparation and professional development programs collectively, those services may still be delivered by IHEs within each state.

Consider Options for Contributing to an Assessment Consortium

Many states that have adopted or are planning to adopt the CCSS are also joining forces to compete in the federal Race to the Top Assessment Program. In addition to a single grant award to develop an assessment program for high school courses, grant awards for up to two state consortia will support the development of comprehensive assessment systems aligned with common standards. This collaborative work has the potential to take a significant burden off of individual states, both financially and in demands on over-burdened staff. Yet an effort among many states — with varying capacity, concerns, and needs — will only succeed if the consortium members are able to navigate complicated issues of project goals, strategies, governance, contracts, procurement, test administration, and reporting.

The burden on states will not be lifted in the interim however, as a great deal of work will be necessary to establish a comprehensive assessment system within the required four-year period. State test directors and offices of assessment are already stretched thin; consortium member states will need to be strategic in determining the most effective role they can play in the consortium’s work. An analysis of the state’s past and current assessment efforts — identifying examples of success and lessons learned — could be helpful in this regard. A historical analysis will give state leaders a clear sense of the areas in which they can offer leadership and areas where they might benefit from knowledge and experience in other states.

Personnel from state departments of education, in an effort to prepare for their possible roles as members of one or more consortia, have participated in several recent convenings. The Hunt Institute commissioned the National Academies of Science's

The quality of the nation’s teachers has been the subject of sharp critiques, and so have many preparation programs. Yet, teacher preparation is often treated as an afterthought in discussions of improving the public education system.

Board on Testing and Assessment — our nation’s repository of research on assessment — to conduct a series of workshops on key considerations for state consortia as they set out to develop a new generation of assessment systems. Sessions hosted by the Alliance for Excellent Education, ETS Center for K-12 Assessment & Performance Management, and the National Academy of Education, with the Stanford Center for Opportunity Policy in Education, have also produced materials and recorded discussions that are available online for state leaders to reference. Additionally, CCSSO has provided support to state leaders, both through their system of State Collaboratives on Assessment and Student Standards and their annual National Conference on Student Assessment.

Basic Elements of Any Standards Alignment Analysis

Many organizations have helped states conduct analyses of content standards, including Achieve, Inc., CCSSO, and several of the regional Research Education Laboratories (RELS). Expertise to conduct this work is also found within institutions of higher education around the nation, including the University of Oklahoma and the University of Wisconsin. Edvance Research/REL Southwest, a center that has conducted more than a dozen standards analyses, including several efforts scrutinized by the Institute of Education Sciences peer review system, has identified a series of six elements that are critical in any analysis of standards (described below). Regardless of whether a comparison is being made between standards and assessments, curricular resources, or the content of teacher preparation, these same basic steps should be taken to ensure that the analysis produces useful information for decision making and action.

1. Clarify the purpose of the analysis.
An essential first step in any analysis is to define the purpose in clear terms. Three possible categories of analysis to consider:

- **Tools and Training Needed.** What content and characteristics must instructional tools and training include to be well-aligned with the content standards? This type of analysis will guide the design of curriculum, teacher preparation, professional development, and assessment systems.

- **Gap Analysis.** Once the requirements of the content standards are analyzed, states can conduct a deficit analysis to determine what it will take to bring current tools and training in line with those demands.

- **Capacity to Implement.** States must also ensure that the desired tools and training can and will be implemented. Analysis of state capacity to implement will investigate whether the state has the necessary human resources, monitoring systems, and supports to enact these activities once they are developed.

Analyses in these categories will help state leaders remain clear about implications of the findings and ensure that the necessary information is generated to develop a plan of action. Clear definition of purpose also establishes a basis for partnership with other states.

2. Identify items to be analyzed.
Once purpose is established, states must consider the structure of their current standards-based system to identify the appropriate items to analyze. State systems are often based on a variety of documents, including content standards; core learning goals; “power standards” or “focal points”; curriculum frameworks; scope and sequence guides for instruction; test frameworks; standards
for professional development; and the required elements of teacher preparation programs. It is important to ensure that each analysis includes the standards documents that are used to guide instructional activity and development of instructional tools.

3. Determine the parameters of the analysis.

States must also determine the parameters of the analysis to produce a level of detail that aids decision making. Many states have already “crosswalked” their current state standards with the CCSS. Yet this is typically the most superficial type of analysis, looking to see only if the content of one set of standards is either partially or completely present in another set. Deeper analysis is needed to tell state leaders and educators how the CCSS mean for instruction and student learning. These additional factors include cognitive complexity (the depth of knowledge required) and breadth (the extent to which the field of learning is covered).

Including these deeper levels of analysis will require greater expertise and more time, training, and expense, but in the end this type of analysis yields richer information about what it will take to implement the content standards. This approach is also more cost effective in the long run, as it can greatly improve system alignment. States can choose from an array of models to guide their efforts to compare the CCSS with current elements of their system. The CCSSO has published an overview of several models of alignment analysis, including those of Achieve, Inc., Andrew Porter of the University of Pennsylvania, and Norman Webb of the University of Wisconsin-Madison.

4. Consider state capacity to conduct the analysis and identify trusted external analysts as needed.

Possibly one of the most challenging aspects of conducting a systems analysis is the identification of experts to undertake the study. Individuals will be needed from the various content subdomains (e.g. reading, writing, etc.) and appropriate grade ranges (e.g. K-5, 6-8, and 9-12). Those involved in the analysis should be free of any conflict of interest and unaffiliated with curricular resources, assessments, professional development, or teacher preparation programs that will materially profit if the standards were to be translated in a particular fashion. These ties are fairly easy to identify among vendors who have contracts with the state. States also have a wealth of expertise within their institutions of higher education, though these experts are often tapped to develop products such as curricular resources, professional development, and preparation of new teachers.

One option is for states to identify an external research entity, such as a Regional Education Laboratory, to ensure these requirements are met and conduct the analysis. If a state determines that it has the capacity to undertake its own analysis, individuals selected to serve as reviewers will need appropriate training and support on any rating dimensions or scales to be used in the study. The state will need to settle on rating criteria and a process for reviewing the standards — the methodology should be carefully designed and should be easily replicable by others. Rigorous training includes feedback to help reviewers become more consistent in their analysis, plus monitoring to check for rating drift over time.

5. Inform important stakeholders about the analysis and engage them in the process.

By informing stakeholders about the above decision points and engaging them in the analysis, state leaders will ensure that key individuals understand the importance and implications of the findings. It is possible that an analysis will reveal that the CCSS require significant changes to current materials or processes. In these cases, the results could generate fear or create resistance to change among stakeholders, trumping the opportunity to develop an improved system. State leaders need to clearly emphasize that the analysis is meant as a first step, opening the door for additional supports to be developed for successful implementation. And since the college- and career-ready standards will be shared among states, the promise of collective effort and pooled resources means that this work does not rest solely on the shoulders of any one state or district.

6. Communicate publicly.

It is critical that state leaders publicly and broadly communicate the purpose and results of their analysis. Clear communication is needed to ensure that parents and other members of the public understand the purpose of the study, the limitations of the findings, and the potential for the findings to generate improvements within the education system during the transition to the CCSS.

TIP:

It can be difficult to integrate the information that comes from deep analysis of content standards into a report that responds to the concerns of various groups (content experts, psychometricians, teachers, etc). Analysts at Edvance Research/REL Southwest have found that asking reviewers to keep specific notes on the differences they see is a useful strategy for recording fine-level detail that is of value to specific audiences.
NEXT STEPS FOR STATE LEADERS

Each state has been through the process of adopting new or revised standards since the origin of standards based reform. This is not an endeavor foreign to states. It is certainly unique, however, that many states will be undertaking the effort to adopt and implement the same set of standards simultaneously. New doors are now opening for states to share resources and expertise during their transition to the CCSS. How can leaders ensure that their respective states capitalize on this opportunity?

• **Determine the information needed at this point.** Are you ready to adopt and seeking information to prepare for implementation? Or is adoption dependent on the relationship between your current state standards and the CCSS? To avoid unnecessary strain on resources and capacity, ensure that any analysis your state undertakes is designed to address your information needs. Tap neutral experts to facilitate this work and build consensus among key stakeholders on the methodology and intended use of the evaluation or standards comparison.

• **Establish an implementation plan as soon as possible.** To ensure that all elements of your standards-based education system are considered in the transition to the CCSS, identify respected leaders within each area to help develop your state’s implementation plan. Remember that the process of aligning system elements to content standards is ongoing and requires periodic evaluation and adjustment. Your state’s implementation plan should include a timeline or process for monitoring alignment over time.

• **Establish a communications plan.** Many individuals throughout your state are already wondering how the CCSS will be implemented and will affect their roles in the education system. Ensure that the work of your state transition team is supported by a communications plan that will get answers to and gather input from key stakeholders across your state. It is also critical to ensure that students, parents, and teachers understand the new expectations.

• **Maximize return on investment.** States now have the chance to share resources in the development and revision of standards, curricular materials, professional development, teacher preparation, and assessment. As you establish timelines for your state and districts to align curricular materials with the CCSS, ensure that your deadlines allow for the incorporation of work being done by state consortia. This will potentially free up time and cost savings that can be used to support your state’s teachers and students as they set out to achieve world-class, college and career ready standards.

A special thanks to Stephanie Dean, Director of Research and Evaluation, for contributing to this issue.
REFERENCES


5 For a description of the project by the Consortium for Policy Research in Education, as well as the first report on learning progressions in science, see http://www.cpre.org/index.php?option=com_content&task=view&id=282&Itemid=149.

6 Council of Chief State School Officers. *What are the Surveys of Enacted Curriculum?* Available online at http://www.ccsso.org/Projects/Surveys%5Fof%5FEnacted%5FCurriculum/.


10 Alliance for Excellent Education. (February 2010). *Principles for a Comprehensive Assessment System*. Brief and webinar available at http://all4ed.org/events/WebinarAssessment022510.

