Developing and Implementing the Common Core Assessments
Key Issues and Needs

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INTRODUCTION

Most states have volunteered to adopt the Common Core State Standards (CCSS) in English/Language Arts and Mathematics. Assessments aligned to those standards are being developed by two federally funded consortia [i.e., Smarter Balanced Assessment Consortium (SBAC) and Partnership for Assessment of Readiness for College and Careers (PARCC)]. The purpose of this paper is to explore key issues and needs related to the creation and implementation of these assessments. *(Note: Descriptions of each consortium's overall design and core components are available in separate attachments enclosed with this report.)*

In fall 2010 the Sandler Foundation conducted a research project to investigate the critical issues and concerns that consortia staff, assessment experts, funders, and states hold around various aspects of the proposed assessment plans. Specifically, three questions guided this exploration:

- ❑ *What are the key planning and implementation components of the consortia proposals?*
- ❑ *What are the critical areas the consortia and other stakeholders will need to address as they relate to the development and deployment of the assessments?*
- ❑ *What supports are needed to ensure high quality and equitable implementation of the assessments?*

While the primary goal of the research was to inform the Foundation's funding priorities, the findings of the study are also germane to others with an interest in the development and implementation of this next generation of assessments.

METHODOLOGY

Interviews were conducted with consortia staff, funders with interests in issues related to the new assessments, state departments of education, and assessment experts. To identify interviewees, the Foundation surveyed funders to determine involvement and interest with the common core standards and assessments. Recommendations were also gathered from various sources across the consortia and among assessment specialists. Susan Sandler of the Sandler Foundation also contributed her perspectives on the guiding questions. All interviews were conducted by phone in December 2010 – February 2011 around the primary research questions and were open to areas of interest and concerns of individual respondents. The interviews contained a range of views, some of which may be in tension with each other. This report seeks to summarize the full range of perspectives.

The list of interviewees included the following:

Consortia and Member States	Assessment Experts	Funders
• *Laura Slover & Jason Weedon, PARCC/Achieve* • *Joe Willhoft, SBAC* • *Kris Ellington, Florida State DOE* • *Mike Middleton, Washington State DOE* • *Jeff Nellhaus, Massachusetts State DOE* • *Scott Norton, Louisiana State DOE*	• *David Coleman, Student Achievement Partners* • *David Conley, Education Policy Improvement Center* • *Linda Darling-Hammond, Stanford University* • *Nancy Doorey, Center for K-12 Assessment and Performance Management at ETS* • *Brian Gong, Center for Assessment* • *Scott Marion, Center for Assessment* • *Chris Minnich, Council of Chief State School Officers* • *Scott Palmer, Education Counsel* • *Ray Pecheone, Stanford University* • *David Wakelyn, National Governors Association*	• *Melissa Chabrán, Kit Viator Elliott & Ash Vasudeva, Gates Foundation* • *Sheri Ranis, Lumina Foundation* • *Chris Shearer, Hewlett Foundation*

CURRENT FUNDER PRIORITIES

Funders are currently supporting or exploring support for different aspects of the assessment development and administration planning. The table on the following pages denotes these key areas and the particular foci for the Gates, Lumina, and Sandler Foundations. The Hewlett Foundation's assessment consortia-related investments are taking shape in 2011. The areas of interest for all of the foundations will continue to evolve.

	Gates	Lumina	Sandler
Prototyping			Exploring support for assessments and series of assessments with robust and engaging performance tasks

Exploring support for a group of states to develop more extended performance activities |
| **Equity** | Investments in common core implementation supports for EL students and support for ELP Standards development (these grants are in the planning stage) | | Exploring support for equity strategies integrated in other funding areas. In addition, advocacy for policies that do not unfairly attach high stakes for students to new assessments |
| **Professional Development & Curriculum** | Awarded grants to create and pilot formative assessment strategies and tools linked to the CCSS. The core design partners for these grants were the Shell Centre and Literacy by Design

(Gates investments are not in curriculum per se but instructional supports/strategies for teachers) | | Exploring support for professional development activities and tools that enable teachers to understand CCSS at a deep and rigorous level and to implement pedagogical strategies that are necessary for students to carry out performance tasks |
| **Communications, Outreach, Advocacy** | Commissioned white papers on communication strategies, shared vision for assessment reform

Provide support for states' adoption of the Common Core standards and for the SBAC and PARCC assessment consortia | Advocacy strategy involving support to organizations to have public and private meetings about IHE role in CCSS and assessment development and implementation work

Will support national thought leaders and organizations in policy to ensure IHE role present in policy discourse; will develop 2 year strategy around set of related investments | Exploring support for communications and advocacy activities that further strong educator implementation, support for the new tests, and ownership and monitoring of implementation |

	Gates	Lumina	Sandler
Technology	Commissioned white papers on automated scoring, common data platform, open and responsive systems Awarded a range of grants to support the development student- and teacher-centered innovations and supports		
Higher Education Engagement	Investments made within US Programs, Post Secondary	Convening IHEs and consortia around updates, K-16 articulation and alignment, range of policy issues (e.g., standards setting, placement and remediation, teacher accreditation)	
State, District, School Transition Resources	Awarded grants to districts to support implementation planning and piloting of tools referenced under PD and Curriculum (sample partners include Ann Shannon & Associates)	Will examine state resources and figure out how to support state policy and advancement around the CCSS. Will conduct due diligence to determine states' priority needs and then make funding decisions accordingly.	Exploring support for state-level implementation decisions related to resource allocation, transitioning to the new tests, infrastructure for professional development

The nuances of specific funders' interests and priorities are embedded in the key themes discussed below. For each of the 7 areas (i.e., prototyping; equity; professional development and curriculum; communications, outreach and advocacy; technology; higher education engagement; and state, district, and school transition resources), the paper describes the importance of each area, common issues and needs identified by interviewees, and consortia plans. Opportunity areas for short-term funding and addressing funding gaps are then presented based on these findings.

1. PROTOTYPING

Prototyping – the processes for intentional, effective and creative development of assessments based on articulated design principles - is critical to the creation of the consortia's proposed assessments. A coherent view of the assessment is needed, including what the assessment ought to look like, what its purposes are, how it will measure its intended outcomes, and the types of items that will measure these outcomes. With this vision in place, prototyping facilitates the specifications for innovative item types by content and assessment experts that are not measured in isolation and bound by traditional testing formats, but rather are aligned to integrated standards and involve a range of testing formats including constructed response and performance-based tasks. If not articulated with clarity, focus, and precision, these specifications will be distributed to vendors who may in turn develop assessment items consistent with more traditional forms of testing.

Key Issues

While there was convergence across interviewees on the importance of prototyping, several specific issues were raised around the focus of prototyping and the urgency of these processes:

- *Areas to Prototype*: Assessment experts pointed to the importance of prototyping in several categories, including 1) overarching assessment designs, including the overall test blueprint, design for inter-relationship of the series of tests across grades, bundling of standards to support more complex thinking activities, 2) innovative items types like constructed response and performance-based items, 3) automated scoring practices.
- *Timeframe*: To ensure adequate time to provide specifications to vendors, develop the various prototypes, and conduct field testing processes, the timeline for prototyping must be aggressive. For example, some experts point to the need for field testing of items to occur no later than Fall 2011 which would mean that prototyping would need to be completed, vendors would have bid, and item development would have begun before then.
- *Conditions for Prototyping*: Several potential barriers to effective prototyping were identified. There is not enough clarity to guide a strong prototyping process— there is not yet full agreement around the purpose and intended uses of the assessments, and the standards have not yet been articulated in sufficient detail with guidance for how they should be integrated and measured. In addition, if the prototyping process occurs as a formal part of the consortia's work, state procurement processes could extend timeframes for engaging vendors in this work.

Consortia Plans

Both PARCC and SBAC have identified prototyping as a key component of their assessment development process. PARCC intends to develop prototypes of through-course assessments

and end-of-year innovative item types (e.g., computer-based tasks), as well as model instructional units. SBAC plans to develop prototypes for tests as a whole and how a series of tests in a subject build over time. These prototypes will be informed by curriculum expertise and a vision for curriculum that includes bundling standards together so that assessments will get at more complex tasks. SBAC will prototype items and performance events based on their proposed computer adaptive assessment framework, including items and performance events for special needs students. Both consortia also intend to utilize states with extensive performance-based assessment experience to pilot items.

2. EQUITY

Many educators agree on the potential of the common core standards and assessments to transform teaching and learning. However, ensuring that the assessment program impacts all students will mean learners from diverse backgrounds must have full and equal access to rigorous learning experiences that develop the knowledge and skills expected by the assessments. The supports for teaching and learning aligned to the common core standards need to be adequately deployed, particularly across schools serving disenfranchised students. Moreover, if the new assessments are to be fair and reliable measures for all students, then the cultural, linguistic, and historical backgrounds of students of color and poverty will be incorporated up front into the design of assessment items. Failure to address these issues could result in biased measures of achievement and unequal access to instruction aligned to the common core standards.

Key Issues

Interviewees discussed several equity issues they felt were important for the consortia, vendors, and support providers to be mindful of as the assessments are created and administered.

- *Accommodations:* Common access and accommodation policies need to be articulated for English Language Learner (ELL) and special needs students. Such policies will ensure that students receive supplementary aides, materials, or equipment, physical adaptations, and curricular support that will allow them to fully participate in the assessment program. In addition, scripted instructions used at the beginning of test administration can contain language that build student confidence and understanding of the test and contribute to more equitable results.
- *Cultural Bias:* Universal design and individual design approaches[1] to item development need to be balanced to ensure that diverse cultural backgrounds, learning styles and individual differences are incorporated. Moreover, prototyping and item development processes need to be intentional in designing items up front

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[1] Universal design integrates various assessment features to allow for access by the widest range of students. Experts check for fairness, accessibility, bias and accommodation needs. Individual design approaches focus on individual differences, including unique factors impacting ELL, special need students, and other subgroups.

in ways that are sensitive to diverse learners rather than merely evaluating statistical reliability for different groups during field testing. In other words, assessment items will be more accessible when equity issues are incorporated from the initial stages rather than waiting until a later stage in the process.

- *Linguistic Bias:* Further research is needed to determine how language proficiency can impact the measurement of content knowledge. Technology may be able to address possible confounding influences. For example, it might be possible to use adaptive testing to assess and adapt for language proficiency as well as content knowledge.
- *Access:* Students from diverse backgrounds should be able to participate in classroom experiences that will prepare them to succeed in schools' adopted curriculum and on the common core assessments. Specifically, students should have equal access to technology, instructional practices, and support resources that prepare them for the kinds of thinking reflected in the new assessments. State and district decision makers will need to make resource allocation and other decisions that enable equitable access.
- *Stakes:* Students that do not have equal access as described above, should not be unfairly impacted by having the new assessments tied to stakes such as high school graduation or grade promotion.
- *Monitoring:* The new assessments should provide data that allows for the measurement of growth and teacher impact in order to ensure that students with the greatest needs are receiving quality instruction.

Consortia Plans

Both consortia will develop definitions, policies, and accommodations for ELL and special needs students. That is, both will define inclusion policies, criteria for identifying eligible students, and lists of accommodations. In addition, PARCC and SBAC describe utilizing universal design processes for creating test items that are accessible to all students. Other administration aspects are also proposed to increase access. For example, SBAC proposes a technology platform for administering adaptive testing that will require minimal installation, operation, and software updates. PARCC plans to develop a technology platform that will enable greater access to computer-based testing with built in accommodations. PARCC will also convene a standing Technical Working Group (TWG) on accommodations and access to ensure issues of equity and fairness are addressed in the design and implementation of PARCC assessments.

3. CURRICULUM AND PROFESSIONAL DEVELOPMENT

The impact of the assessments on student learning will depend largely on the strength of the curricular program and teachers' instructional delivery. In comparison to existing state standards, the CCSS focus heavily on deeper progress in mastering standards within the course of a year, integration of standards, application of knowledge to real life situations, and demonstration of higher order thinking. These shifts represent significant changes for many classroom teachers. Although the new assessments will not be administered until 2014,

aligning curriculum and teacher training to the CCSS are needed now to shift paradigms and build teacher capacity. Many states report significant overlap between their current standards and the CCSS, but recognize differences such as the timing of when certain standards are introduced, greater focus on the integration of standards and math practice standards in the CCSS, and more emphasis on critical thinking skills. Teacher training and support tools that makes these differences explicit and provide models and exemplars should significantly aid in this transition.

Key Issues

A range of suggestions related to curriculum and professional development were offered to help schools and districts transition to the CCSS, including the following:

- ***Teacher Professional Development***: There is general agreement that preparing teachers for the new assessments should include making sure they understand what the new tests will involve and how they can interpret the results. In addition, the following topics, while not specifically about assessment, have also been suggested as important in preparing teachers for the new assessments:
    - o Understanding the more rigorous and academically challenging aspects of the CCSS. The new assessments will be measuring the more complex and challenging aspects of the standards as well as the more basic dimensions. Teachers will need to understand content standards at a level that previous assessments may not have required of them.
    - o New instructional strategies. Since assessments will be measuring complex problem-solving skills that may not have been previously assessed, many teachers will need training in the types of instructional strategies that enable students to acquire these skills.
- ***Alignment of Professional Development for the CCSS and New Assessments.*** Since what teachers need to know about the CCSS is related to how these standards will be assessed, ideally, teachers' introduction the CCSS will be aligned with and provide a foundation for professional development for the assessments.
- ***Tools and Activities***: Suggestions of tools that would assist teachers in this transition include learning progressions, curriculum frameworks, model units, student work exemplars, formative assessments, and teacher scoring tools. Involvement of teachers in assessment development and scoring is one effective method of professional development.
- ***Elaboration of Standards & Assessment Targets***: Clarity is needed around the standards as well as assessment targets so states, districts and schools can plan their professional development. Additionally, such transparency is needed for textbook publishers who are beginning to build aligned curricular materials.

Consortia Plans

SBAC is focused on generating formative tools to help teachers transition to the CCSS and to prepare for the new assessments. The consortium is in the early stages of this work, but these tools may include streaming videos of exemplar lessons, instructional modules, or sample performance-based tasks. SBAC will also use funds from the supplemental federal assessment grant to support state level teams with designing strategies to implement the CCSS.

PARCC intends to train a cadre of approximately 25 lead teachers per PARCC state per year to train others in their respective states around the CCSS. Professional development modules will be created which focus on explaining the new assessments and how to interpret and use results. The consortium also plans to build model content frameworks as well as exemplar lessons and model assessment items for states and districts to use. In addition, PARCC will be developing a number of tools to support teaching and learning on both ends of the grade span continuum. In particular, PARCC will develop a set of K-2 formative resources (e.g. activities, tasks, rubrics) that teachers can use to help ensure their youngest students are building the foundation they need for success in upper elementary school. And, PARCC will develop (with input from higher education faculty) 12th grade bridge courses to help ensure a smooth transition from high school to postsecondary education.

4. COMMUNICATIONS, OUTREACH, AND ADVOCACY

Communications, outreach, and advocacy all involve interconnected strategies that support the effective implementation of an assessment program. For purposes of this project, communications center around two major groups – educators and the public. If educators are not aware of the components of the assessment and do not understand its intended purposes, then the implementation of the program is likely to be severely hampered. Equally important, if the public does not develop ownership over the assessment, then their support and buy-in to the process and the results will remain at low levels.

Communication and outreach activities occur on a continuum. On one end of the continuum, more superficial activities build basic awareness in target audiences. Deeper, more extended activities help audiences move to understanding, receptivity, and, finally, active support at the other end of the continuum. At the awareness level, communication and outreach around the assessments will build knowledge of what's entailed with the program. To build understanding of the purposes of the assessment among educators and receptivity and support among the public, transparent, ongoing, two-way communication channels around why the assessments were developed and how they are linked to the improvement of teaching and learning will be critical. If communications strategies are successful in building deep engagement, communities will both defend the assessments and also monitor poor implementation and advocate for improvements where needed.

Key Issues

- *Assessment Information*: Although the assessments will not be administered until 2014, most agreed that communication is needed now with educators at all levels around the nature of the assessments, what their purposes are, what they will measure, how they will be developed, the format of the assessments, how scoring will be conducted, and how the results will be used.
- *Instructional Implications*: In terms of transforming practice, educators needs to know how the assessments are aligned to the CCSS and what can be done now to help transition to the new standards, their integration, and the critical thinking skills embedded in the standards.
- *Public Will:* Several need areas were identified to build public awareness, receptivity, and support for the new assessments. In particular, there is a need for public understanding of how the new assessments are different from prior ones, why results on proficiency rates may look different from the past, how results will be used for placement, remediation, school accountability, and other decisions, and how the implementation of the assessments will be monitored. There is a special concern about finding strategies to build enough public support to withstand negative reactions when new assessments initially yield lower passing rates.
- *Current Communications Status:* Currently, many states outside of the governing group of each consortium appear to be in the very early stages of understanding the new assessments and what they entail. There is a sense of urgency about the need to roll out communication strategies in different states to begin informing districts, schools, community members, and other stakeholders. The issues discussed by interviewees point to a stronger focus on awareness-building in the short term. However, the need to develop deeper understanding and buy-in of the assessments will remain significant components.

Consortia Plans

Both consortia acknowledge the extensive work that is needed in the area of communications, outreach and advocacy, but point to limited funding in the federal grant to support related strategies. Still, PARCC intends to utilize resources towards some staffing time to develop communication tools such as communication briefs and college readiness outreach campaign tools as well as a PARCC website to disseminate information to different stakeholders. The consortium will also establish a Partnership Communications Committee to support states on informing the public of the new assessments and their benefits, how states will transition to the new systems, and how the assessments will positively impact student achievement. The Committee will work with states to build stakeholder coalitions that support the assessment, reaching out to State Boards of Education, state legislators, unions, business community, school districts, and advocacy groups.

SBAC will initiate a cross-state network to inform different stakeholders of the consortium's work to establish shared understandings of college and career readiness. The consortium will also develop a Professional Capacity and Outreach Working Group that will implement a communications and outreach plan to update the public and other stakeholders on the assessment system and its purposes, released test items and scoring rubrics, achievement level descriptions, and how to interpret assessment results. The group will implement two-way communication channels to routinely gather feedback from these stakeholders.

5. TECHNOLOGY

The proposals for both consortia rely heavily on technology for the successful administration and scoring of the new assessments. Technology will be leveraged to generate more engaging assessment experiences for students while expediting scoring and reporting of results. In terms of research and development, technology advances are needed to ensure automated scoring processes are sufficient by 2014. Artificial intelligence (AI) will enable faster, more cost-efficient scoring of large scale assessments, but needs to be balanced with teacher scoring processes which can serve as powerful professional development. If advances in artificial intelligence (AI) for automated scoring have not reached adequate levels, then cost-efficient reliable results for determining individual performance levels, school growth, and accountability monitoring will be in question. Viable alternatives for scoring may need to be identified, or the format of the assessments will need to be revisited. Either course could pose a threat towards maintaining a focus on innovative item types that can assess content, reasoning, and thinking skills. Even with adequate technology advances in scoring, the technology infrastructures of many schools and classrooms must be developed to adequately administer the new assessments.

Key Issues

- ***School and District Technology Infrastructure:*** There is an overarching concern about some districts' and schools' capacity to build the technological infrastructure to support online testing by 2014. These gaps impact not only the assessment administration process but also access to support resources needed to provide students with experiences of carrying out the types of activities included in the assessments. If schools do not provide students with routine opportunities to work with spreadsheets for example, students will have much more difficulty when they encounter a spreadsheet for the first time in an assessment.
- ***Technology Funding:*** Funding issues amid ongoing budget cuts are of significant concern as schools and districts identify deficiencies in hardware and connectivity and devise strategies to remediate these needs.
- ***Artificial Intelligence Developments:*** An R&D agenda that maps out AI priorities to investigate needs to be identified as soon as possible in order to ensure that advances are made in the next 3 years leading up the deployment of the assessments. Scoring of a range of assessment types, including constructed response, performance tasks, and through-course assessments, all need to be further investigated for reliability and validity.

Consortia Plans

Both consortia are developing audit tools to help states evaluate their districts' and schools' current hardware and networking infrastructure, identify gaps, and suggest strategies to remedy these issues. Both are also investing in R&D agendas to study AI developments to ensure technologies are in place to facilitate scoring of each consortium's assessment item types. In addition, SBAC is examining ways to use technology to deliver training programs, disseminate score reports, create social networks for teachers, and to generate testing accommodation protocols to increase accessibility to the assessments. PARCC will similarly leverage technology to score constructed response and performance tasks as well as to distribute assessment results to teachers in a timely manner,

6. HIGHER EDUCATION ENGAGEMENT

As the common core assessments are developed, engagement with institutions of higher education (IHEs) is essential to ensuring that students enter college ready to meet academic expectations. IHEs must play a significant role in defining common college readiness standards that students will be able to benchmark their progress against throughout their K-12 experience. These results will provide schools with data to intervene and close gaps in achievement.

Key Issues

A range of IHE engagement issues were raised by interviewees in this project. These issues frame potential roles for representatives of IHEs in defining standards and training teachers.

- *College and Career Readiness*: Clarity is needed in defining what college and career readiness actually means. Differences in readiness standards for institution types (e.g., 2-year vs. 4-year institutions) and fields of study should be articulated to provide a framework for multiple pathways towards demonstrating readiness.
- *Placement and Remediation:* Collaboration with IHEs is critical to reaching decisions on cut scores for college course placement and remediation policies.
- *Teacher preparation programs:* IHEs need to evaluate and refine teacher preparation programs to focus on training teachers to deliver a comprehensive curriculum tied to the CCSS.

Consortia Plans

PARCC has set up a series of activities to engage and collaborate with IHEs, including recruitment of higher education faculty and representatives to serve on advisory and technical working groups, such as their College Ready Advisory Committee. Higher education leaders and faculty from across PARCC states will participate in the design of the high school assessments and the setting of standards (i.e., establishing performance levels) rigorous enough to signal

readiness for first year credit-bearing courses. In addition, higher education representatives will participate in the assessment development process by reviewing assessment items, helping establish the research agenda, and helping establish protocols and rubrics for scoring student work to ensure it meets the level of expectation that will prepare students for college. PARCC is providing some limited financial support to states to support higher education engagement. Similarly, SBAC intends to engage IHEs in creating achievement standards to define college readiness and develop policies around enrollment and remediation. The consortium will create technical and advisory group to include IHE representatives.

7. STATE, DISTRICT, AND SCHOOL TRANSITION RESOURCES

A variety of resource issues must be addressed to help states, districts, and schools effectively transition to the common core standards and assessments. In particular, expertise and technical assistance is needed around financial resource decisions, time resource decisions, and vendor management transitions in order to enable educators at all levels to understand the resourcing needed to comprehensively implement the new assessments and to devise strategies, as needed, to address gaps in resources.

- *Financial Resources*: Cost analysis is needed to determine the cost of the implementing the proposed assessments. One interviewee noted that states currently pay a wide range for state testing, but all were told the cost of the new assessment would not surpass their current rates. Some have received conflicting information about the costs. In addition, the costs for administering and scoring assessments as well as implementing both paper and online testing while transitioning to the new assessment program should be determined to help states plan.
- *Time Resources*: The amount of time needed to administer the new assessments needs to be fleshed out. While estimates of online adaptive testing are between 30 to 60 minutes, the time frame for through-course assessments could be up to 6-8 hours in totality. Implications exist for planning for instructional time and pacing, teacher union support, etc.
- *Vendor Management*: As the new assessments are developed, states will need support in closing out existing testing vendor contracts and transitioning to new vendors.
- *Aligning Current Standards and Textbook Materials to the CCSS*: Some states discussed needs around mapping their current state standards against the CCSS in order to determine specific gaps and areas of needed professional development. In addition, some districts have recently undergone textbook adoptions and it is not entirely clear how well aligned these materials are to the CCSS. Some districts, then, need support in mapping this level of alignment and identifying gaps where supplemental resources might be necessary.
- *Accountability Suspension*: Some suggestions were made for an "accountability holiday" in 2013 whereby federal accountability is suspended to ease states' transition to new assessments.

OPPORTUNITY AREAS

Collectively, the key issues and areas of need identified by assessment experts, current funding priorities of foundations, and transition needs expressed by consortia and states all hold implications for several opportunity areas. The following describes areas of support needed particularly in the short term as the proposed assessments systems are developed.

- *Urgent Issues:* Consistent with the findings throughout this report, several areas were recognized as urgent priorities for both consortia to address in the next few months. These include: 1) leveraging external funding sources to lead prototyping efforts, 2) ensuring that the experiences and needs of diverse learners inform the item development process up front, and 3) developing tools and strategies to support states in devising and deploying their communication plans.

- *Consortia Support:* Both SBAC and PARCC have identified specific areas of support they need to strengthen the implementation of their assessment plans. Specifically, SBAC identified the following: 1) ELA and math content expertise to inform test development processes; 2) communications support to update and build support among states; and 3) business planning support for the organization after the federal grant has expired. PARCC identified needs around the following: 1) prototyping work in connection with but not through consortia to avoid lengthy procurement processes in states; 2) communication support to further outreach to states; and 3) coordination across supporting funders.

- *Funding Gaps*: In examining the current funder priorities, it appears that some components of the assessment development and implementation work are directly resourced at greater levels than others. The prototyping work has been prioritized across multiple foundations, while curriculum and professional development as well as communications and higher education engagement are receiving some targeted support. Specific equity issues, while embedded in the interests of funders, are only directly targeted in minimal ways at the current time. Last, it should be noted that some respondents pointed to the need for coordination among funders to ensure alignment and efficiency in working with multiple partners.

These opportunity areas are relevant to funders, assessment experts, support providers, researchers, and policy makers who are focused on the implementation of the common core standards and assessments. Each of the areas described will be essential to address if the intended impact of the assessments are to be realized across schools and communities.

PARCC

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS
ASSESSMENT SYSTEM DESIGN ELEMENTS

States in the Partnership are committed to building their collective capacity to increase the rates at which students graduate from high school prepared for success in college and the workplace. The Partnership's assessment system will be anchored in the **Common Core State Standards** (CCSS) that are consistent across states, clear to the public, and provide an on-ramp to college and careers. PARCC assessments will include sophisticated items and performance tasks to measure critical thinking, strategic problem solving, research and writing, e.g., measure the full range of the CCSS. PARCC features **through-course testing**, which means that students will take parts of the assessment at key times during the school year, closer to when they learn the material. PARCC assessments will maximize technology and, in most grades, assessments will be computer administered. Finally, states in PARCC will adopt common assessments and common performance standards that will allow for **cross-state comparability**.

The PARCC Assessment System Design is a **distributed summative assessment** for mathematics and English language arts (ELA), which means a student will have multiple opportunities to demonstrate mastery of knowledge and skills. A student's summative score will not be dependent on just one end-of-year testing opportunity, but on the basis of multiple assessments:

- Three through-course components distributed throughout the year in ELA and mathematics, grades 3-11.
- One Speaking/Listening assessment administered after students complete the third through-course component in ELA; required but not part of summative score – could be used for course grades.
- One end-of-year assessment.
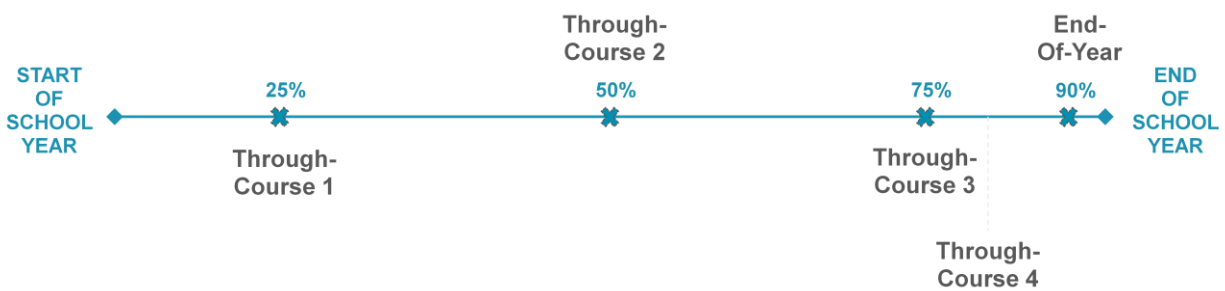
Administration and Scoring
The overall assessment system will be administered via computer and will include a mix of constructed response items, performance tasks, and computer-enhanced, computer-scored items. Constructed responses are open ended questions instead of multiple choice that measure a student's cognitive skills and content knowledge. A combination of artificial intelligence (AI) and human scoring will be employed, and states will individually determine the extent to which teachers will be involved in official scoring.

College and Career Readiness
PARCC assessments will provide students with opportunities to engage in meaningful work throughout the year that reflects the demands of college and careers: application of skills to real world problems and the ability to write effectively about material they've encountered, research and evaluate sources, and to analyze and make inferences.

Anchoring the assessment system to a college- and career-ready benchmark creates a more meaningful target. Scoring "proficient" on the assessments will mean students are on track for the next steps in their education. In high school, achievement results will send an early signal about whether they are ready for first-year, credit-bearing coursework in English and mathematics at two- and four-year public institutions in all PARCC states. This

will transform the student transition from high school to college by creating seamless expectations between the K-12 and postsecondary sectors, inspiring highly-coordinated curriculum programs for students, promoting clearer communication to parents and students about what it means to be "ready", and, ultimately, lead to greater rates of student success.

Improving Student Learning

The distributed design of PARCC assessments will help teachers improve their instructional practices and therefore help improve student learning in several ways.

- Assessments will be instructionally sensitive, occurring closer in time to when students learn the material.
- The data generated by the PARCC assessments will help teachers identify gaps in students' knowledge in time to adjust plans for instruction during the next quarter, provide extra support to students who are struggling, or provide academic stretch to those students meeting or exceeding readiness (much like California's EAP program does in 11th and 12th grades).
- The PARCC system includes professional development material to support teaching and learning such as model curriculum frameworks, model instructional units, sample tasks and items, common rubrics, and examples of quality student work aligned with the assessments and the CCSS (California's EAP developed a 12th grade Expository Reading and Writing Course for implementation in 12th grade and a professional development program to train teachers how to use this curriculum.).
- PARCC will develop a select number of formative assessment tools, including K-2 developmental tasks and a Text Complexity Diagnostic Tool.

The wealth of data, tools and supports produced by the assessment system allows parents to understand their child's performance, strengths and weaknesses, and learning needs. Similarly, students will be able to adjust their learning strategies based on their performance. The through-course components, coupled with the supporting teacher material, will serve as the foundation for a system of continuous student learning and achievement.

Assessment Tools and Resources

States in PARCC will also collaborate on tools and resources that will enhance the grades 3-11 assessment system design including the following:

Formative Tools:
- Text Complexity Diagnostic Tool: a computer-adaptive tool to identify students' proximate zone of development and supply suggestions for appropriate texts for students to read.
- K-2 Assessments in ELA/Literacy and Mathematics.

A PARCC Resource Center:
- Model curriculum frameworks
- Sample tasks
- Released items with item data, student work, and rubrics
- Instructional units

SMARTER
Balanced Assessment Consortium

Core Components of the SMARTER Balanced Assessment Consortium

The Consortium's goal is provide a comprehensive system of assessments and tools that can help all students to leave high school prepared for postsecondary success in college or a career. With support from institutions of higher education and workplace representatives, the Consortium's system of measurement tools will have three core components, all aligned to the Common Core State Standards:

> (1) Computer adaptive summative assessments used for accountability and growth,
>
> (2) Computer adaptive interim assessments used to assess student progress through the year, and
>
> (3) Formative tools and processes, used by teachers for gathering classroom-based evidence and for professional development.

Together, these three components will support student progress toward college and career readiness and provide student-level data throughout the instructional year to inform and guide instruction, interventions, and professional development.

The computer adaptive summative assessments will occur within the last 12 weeks in grades 3-8 and 11, with results reported within two weeks. Students will have the opportunity to take the assessment twice. The assessments will include a variety of item types (i.e., selected-response items, constructed-response items, and technology-enhanced items), and two performance tasks each year in English language arts and two in mathematics; a performance task will take place across two hour-long assessment sittings. Computer adaptive testing is a method of presenting computer-based test items to students such that the test is customized for each individual student, basing item selection on the student's performance as he/she takes the test. This method provides dramatic testing efficiencies, and yields very precise measurement of student performance across the range of student achievement, a feature that is critically important when reporting student growth.

The computer adaptive interim assessments will be flexibly administered at times determined by teachers/schools. How students perform on these assessment items/tasks will be open and available for review and intervention, affording teachers and students the opportunity to understand the kind of work that is expected to reach proficiency, and to examine the misconceptions students may have. The interim assessments, which will also include performance tasks, will be on the same scale as the summative assessments, helping students and teachers meaningfully understand the results.

The Consortium is committed to the proposition that formative assessment is more than a collection of tests. Rather, it represents a way of integrating evidence about student knowledge and skills into instructional practice. The formative tools and processes component, delivered through a comprehensive Web-based portal, will provide model lessons and associated classroom-based assessments, professional development modules on assessment literacy and on how to use effective assessment strategies, and opportunities for item and task development and scoring. The student reporting and dashboard analysis tools will reside on the same portal, delivering an integrated suite of services for teachers and administrators.