RACE
TO THE
TOP
ASSESSMENT

Partnership for Assessment of Readiness for College and Careers

Year Two Report

U.S. Department of Education
Washington, DC 20202

May 2013

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Introduction

ABOUT THE RACE TO THE TOP ASSESSMENT PROGRAM

The Race to the Top Assessment program was authorized as part of the American Recovery and Reinvestment Act of 2009 (ARRA). In September 2010, the U.S. Department of Education (Department) awarded competitive, four-year grants to two consortia of states, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (Smarter Balanced).[1]

The two consortia are developing comprehensive assessment systems that are valid, support and inform instruction, provide accurate information about what students know and can do, and measure student achievement against standards, including those that are typically hard to measure, designed to ensure that all students gain the knowledge and skills needed to succeed in college and the workplace. The assessment systems must include one or more summative assessment components in mathematics and in English language arts that are administered at least once during the academic year in grades 3 through 8 and at least once in high school; both consortia are also creating a series of diagnostic, formative, or interim tests that will be available for their member states to provide ongoing feedback during the school year to inform teaching and learning. The assessments must be accessible to all students, including English learners and students with disabilities. PARCC and Smarter Balanced will each develop a common measure across their member states of whether individual students are college- and career-ready or on track to being college- and career-ready. The assessment systems will provide an accurate measure of student achievement, particularly for very high- and low-achieving students, and an accurate measure of student growth over a full academic year or course.

These assessment systems, which will be operational in the 2014-2015 school year, are intended to play a critical support role in educational systems; provide administrators, educators, parents, and students with the data and information needed to continuously improve teaching and learning; and help meet the President's goal of restoring, by 2020, the nation's position as the world leader in college graduates.

RACE TO THE TOP ASSESSMENT PROGRAM REVIEW

As part of the Department's commitment to supporting states as they implement ambitious reform, the Department established the Implementation and Support Unit (ISU) in the Office of the Deputy Secretary to administer, among others, the Race to the Top Assessment program. The goal of the ISU is to provide collaborative support to grantees as they implement unprecedented and comprehensive reforms to improve student outcomes. By building true partnerships with grantees, the ISU moves beyond a compliance-based monitoring structure while maintaining high expectations for results.

Consistent with this goal, the Department has developed a Race to the Top Assessment program review process that not only addresses the Department's responsibilities for fiscal and programmatic oversight, but is designed to identify areas in which the consortia need assistance and support to meet their goals. The ISU works with the Race to the Top Assessment consortia to identify and provide support based on their specific plans and needs. ISU staff encourages collaboration and partnership across the consortia and with outside experts to achieve and sustain educational reforms that improve student outcomes.

The consortia are accountable for implementing their approved Race to the Top Assessment plans, and the program review is a continuous improvement process.[2] Regular updates and data from the consortium

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[1] More information about the Race to the Top Assessment program is available at www.ed.gov/programs/racetothetop-assessment.

[2] More information about the ISU's Race to the Top Assessment program review process can be found at: www.ed.gov/programs/racetothetop-assessment/review-guide.pdf.

inform the Department's support for the consortia. The consortia may submit for Department approval amendment requests to a plan and budget provided that such changes do not significantly affect the scope or objectives of the approved plans. The ISU posts the approved applications and plans from the consortia, including any approved amendments, on the program website.[3]

If the Department determines that a consortium is not meeting its goals, activities, timelines, budget, or annual targets or is not fulfilling other applicable requirements, the Department will take appropriate enforcement action(s), consistent with 34 CFR § 80.43 in the Education Department General Administrative Regulations (EDGAR).

ABOUT THIS REPORT

The Department used the information gathered during the program review process (e.g., through monthly calls, an on-site visit conducted in August 2012, and the consortium's annual performance report (APR) which was submitted in August 2012) to draft this report on the consortium's year two implementation of the Race to the Top Assessment program. This report serves as an assessment of the consortium's overall implementation of its approved plan, highlighting successes and accomplishments, identifying challenges, and noting important lessons learned by the consortium during the second year and key activities anticipated in year three. The report is focused on the four primary components of the consortium's activities: governance; assessment design and development; professional capacity, outreach, and communications; and technology.

The report focuses on the second year of the grant, from November 2011 through the end of December 2012 unless otherwise noted. Progress subsequent to that time will be reflected in the year three report.

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[3] Approved plans and any approved amendments are available at: www.ed.gov/programs/racetothetop-assessment/awards.html.

About the Partnership for Assessment of Readiness for College and Careers

The Partnership for Assessment of Readiness for College and Careers (PARCC) consists of 22 states (see figure 1). The nineteen governing states are involved in policy decision-making for the consortium and are committed to using the PARCC assessment system when it is operational. Three others are participating states, meaning they join PARCC efforts without voting on policy and may also be involved in the work of the other consortium. Awarded a grant in the amount of $185,862,832 by the Department in September 2010, PARCC selected Florida to serve as its fiscal agent. The consortium contracted with Achieve, Inc. as its project management partner, through a competitive bidding process.

States can hold either governing or participating roles in the consortium. Governing states differ from participating states in that governing states are committed to implementing the PARCC assessment, work only with this consortium, are deeply involved in policy decisions, and have a voting member on the Governing Board. Participating states may be a member of both PARCC and Smarter Balanced but do not vote on policy matters in either consortium and are not obligated to implementing the developed assessments. During the second year, the number of PARCC governing states increased from 18 at the close of year one to 19, indicating that member states remain committed to the consortium and that an additional state has increased its level of commitment to and involvement in PARCC. Figure one below depicts PARCC member states.

Figure 1. State membership in PARCC as of January 31, 2013
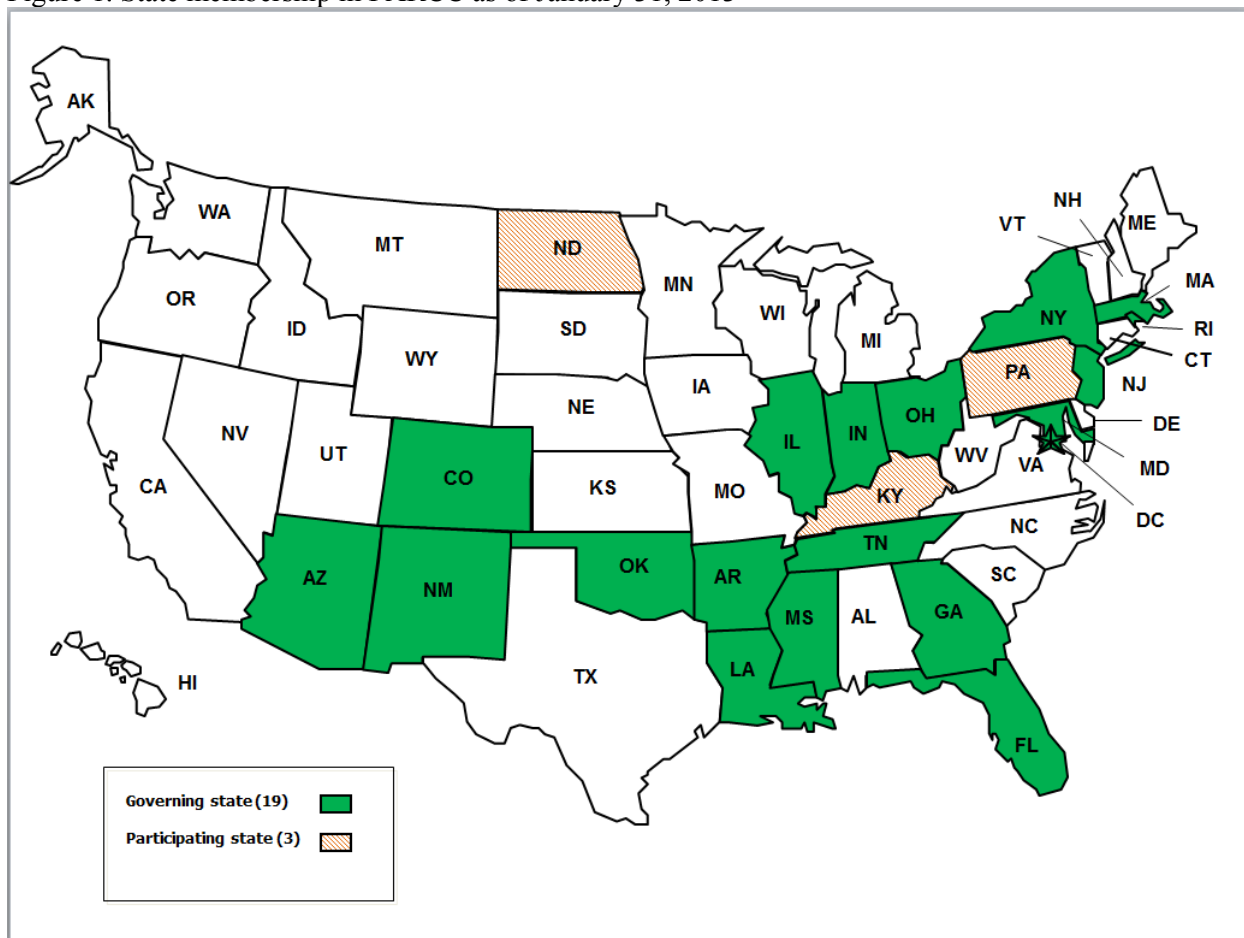
PARCC's application included a theory of action based on a state-level commitment to improving college- and career-readiness among graduating students. As described in the consortium's overview posted on its website at www.parcconline.org/sites/parcc/files/PARCC_Overview_January2012.ppt, PARCC is pursing five major goals:

1. **Create high-quality assessments** that determine whether students are college- and career-ready or on track to being college- and career-ready; assess the full range of the Common Core State Standards (CCSS), including standards that are difficult to measure; measure the full range of student performance, including high- and low-performing students; provide data during the academic year to inform instruction, interventions, and professional development; provide data for accountability, including measures of growth; and incorporate innovative approaches throughout the system.

2. **Build a pathway to college- and career-readiness for all students.** The combination of timely student achievement data showing whether students have mastered the content and skills in the CCSS and are on-track to college-and career readiness; scores in high school that indicate student readiness for careers and college-level coursework; and targeted student supports and interventions should lead to student success in first-year, credit-bearing, postsecondary coursework.

3. **Provide assessments and resources that support educators in the classroom**. PARCC is building:
   o model content frameworks to support implementation;
   o professional development modules to support educator use of the assessment data;
   o educator-led training to support "peer-to-peer" learning; and
   o a system that delivers student achievement data to educators in a timely way.

   In combination, these resources will provide educators with the information they need to support their students in becoming college- and career-ready.

4. **Develop technology-based assessments appropriate for the 21st century.** PARCC's use of technology will impact several aspects of its assessment system.
   o Item development using innovative, engaging tasks better approximate the work students will be asked to do in college or careers.
   o Administration of assessment through technology reduces paperwork, alleviates shipping/receiving costs and logistical concerns, and improves physical test security through removing paper storage.
   o Scoring efficiency and accuracy will improve by combining human and automated scoring.
   o Reporting student results will occur closer to assessment administration to better inform instruction, intervention, and professional development.

5. **Generate valid, reliable, and timely data, including measures of growth that can be used for accountability.**
   PARCC assessments will be designed to generate valid, reliable, and timely data for measuring:
   o School and district effectiveness;
   o Educator effectiveness;
   o Student readiness for entry-level, credit-bearing college courses; and
   o Comparisons with other state and international benchmarks.

PARCC is developing an assessment system that includes several components. Specifically, the PARCC comprehensive assessment system will include the following:
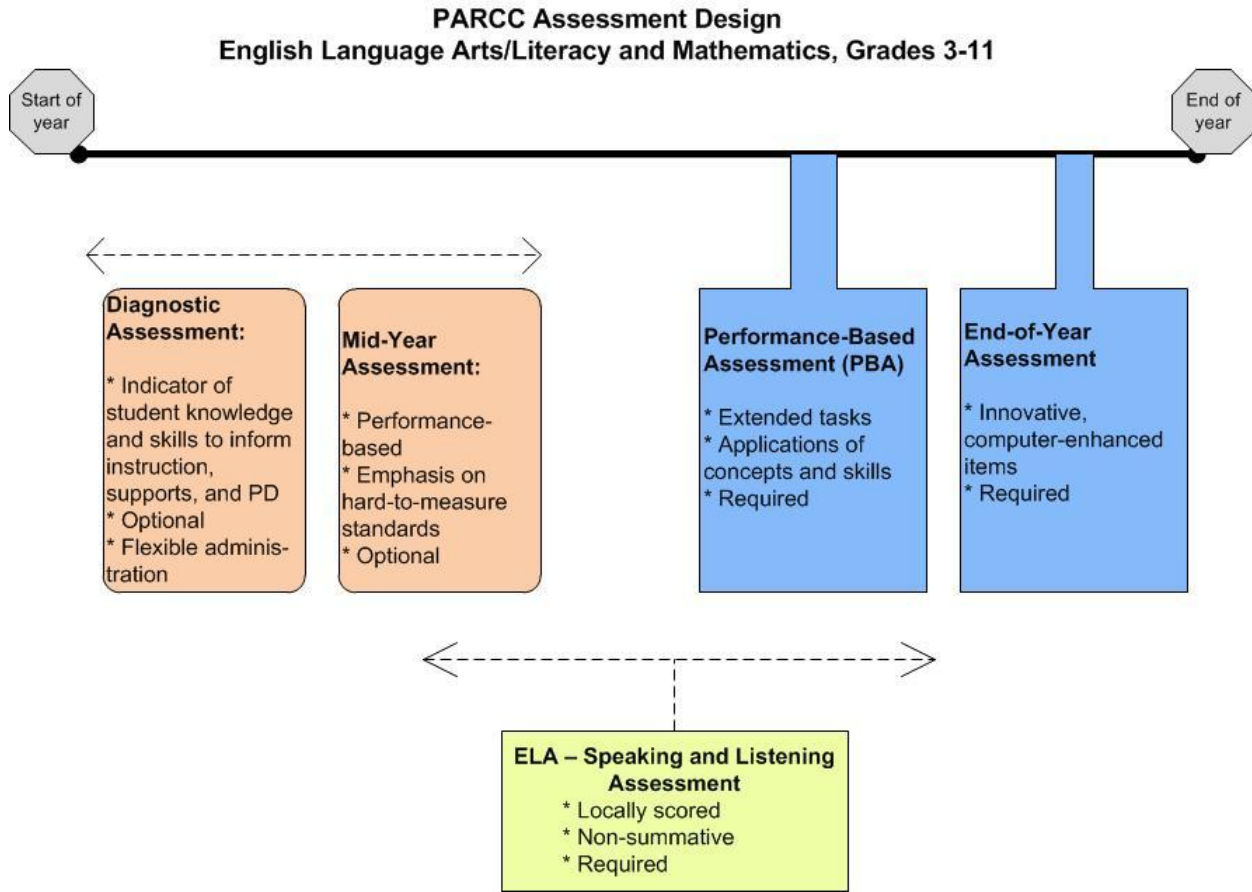
- Summative assessments that include both computer-administered, innovative, technology-enhanced item types and extended performance tasks for grades 3-11 in mathematics and English language arts;
- Assessment of speaking and listening skills that would be required for grades 3-11, though not included in the summative English language arts score;
- Optional diagnostic assessment components for grades 3-11 in mathematics and English language arts that could be administered and re-administered as needed to hone in on a student's precise knowledge and skills;
- Optional mid-year assessments for grades 3-11 in mathematics and English language arts that will focus on performance-based tasks covering standards that have traditionally been difficult to measure. These would assist students, parents, and educators in gauging student progress while allowing for mid-course changes to instruction;
- Optional formative assessment resources for grades K-2;
- High school mathematics assessments will include two end-of-course pathways: Integrated Mathematics I, II, and III; and Algebra I, Geometry, and Algebra II;
- Rich resources for educators, including model content frameworks, item prototypes, and released assessment items;
- Professional development opportunities for educators through their Educator Leader Cadres, a leadership network for K-16 educators, and through online professional development modules;
- Online reporting system for states in order to facilitate secure access to key data about student progress toward college- and career-readiness; and
- Partnership Resource Center, an online one-stop shop for educators to access PARCC instructional resources, diagnostic and formative assessments, released items and assessment data.

As depicted in figure 2, the PARCC summative assessment score will consist of two components:

- Performance-based assessment administered as close to the end of the school year as possible; and
- Computer-enhanced assessment, including selected response, constructed response, and technology-enhanced constructed response items taken near the end of the school year.

All PARCC states formally adopted the CCSS, the college- and career-ready academic content standards in English language arts and mathematics that member states selected and to which the assessment system will be aligned.

Figure 2. PARCC assessment system

PARCC Assessment Design
English Language Arts/Literacy and Mathematics, Grades 3-11

Start of year — End of year

Diagnostic Assessment:

* Indicator of student knowledge and skills to inform instruction, supports, and PD
* Optional
* Flexible administration

Mid-Year Assessment:

* Performance-based
* Emphasis on hard-to-measure standards
* Optional

Performance-Based Assessment (PBA)

* Extended tasks
* Applications of concepts and skills
* Required

End-of-Year Assessment

* Innovative, computer-enhanced items
* Required

ELA – Speaking and Listening Assessment
* Locally scored
* Non-summative
* Required

Assessment Design and Development

The extent to which the consortium is developing a comprehensive assessment system that measures student knowledge against the full range of the college- and career-ready standards, including the standards against which student achievement has traditionally been difficult to measure; provides an accurate measure of achievement, including for high- and low-performing students, and an accurate measure of student growth over a full academic year or course; and produces student achievement data and student growth data that can be used to determine whether individual students are college- and career-ready or on track to being college- and career-ready.

In year two, PARCC focused on item prototyping, clarifying specific assessment design plans, and beginning to write and review items. During the second year, the consortium adjusted the Model Content Frameworks it released in year one to reflect input from practitioners who had begun employing those resources to support instruction. PARCC also developed a high-level definition of what it expects for students to demonstrate college- and career-readiness and the educational implications for students who perform at particular performance levels on the PARCC assessments.

CONTENT FRAMEWORKS
In year two, PARCC updated the Model Content Frameworks for English language arts and mathematics that it initially released in year one. The content frameworks, available at www.parcconline.org/parcc-content-frameworks, articulate the key areas of focus in the content standards on which the assessment will be based. The content frameworks are designed to support state and local implementation of the CCSS[4] and to inform the development of PARCC's item specifications and blueprints. After extensive year one teacher and higher education input and public comment, the consortium requested further feedback from practitioners who had begun implementing the content standards and used the Model Content Frameworks as a resource. Accordingly, the consortium took further input on the frameworks during spring and summer 2012 and released a revised version of the English language arts framework in August 2012 and a revised version of the mathematics framework in November 2012, which included additional clarification on high school mathematics.

ASSESSMENT DESIGN
As part of the summative item development solicitation, released in December 2011, PARCC included an initial draft of the test blueprints, specifying item types and anticipated numbers of each for English language arts and mathematics assessments at each grade level. The assessment design calls for multi-step problems in mathematics and research simulations in English language arts. The computer administration should also allow for multiple layers of questioning resulting in possible partial credit, which can more precisely report student understanding than items for which a student receives all credit or no credit, such as are commonly found on existing state assessments. The summative item development solicitation also included examples of the kinds of items PARCC seeks for a truly next-generation assessment system. Over the remaining portion of year two, PARCC continued to refine the test blueprints, developing evidence statements and item and task models to guide item development.

During year two, PARCC also clarified the specific assessments it will use to determine college and career readiness for high school students. PARCC will use the "English language arts/literacy (ELA/L) 3" assessment (the final ELA/L assessment, normally taken during the junior year) for determining college and career readiness since the ELA/L content standards build throughout high school. However, in

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[4] The Department notes that all resources developed by PARCC are intended as exemplars only and do not prescribe scope and sequence or curriculum, which are and remain state and local decisions.

mathematics, PARCC will offer two course sequences: Algebra I, Geometry, and Algebra II; and Integrated Mathematics I, Integrated Mathematics II, and Integrated Mathematics III. In December 2012, the Governing Board (K-12 Chief State School Officers from governing states) and the Advisory Committee on College Readiness (ACCR), composed of presidents and chancellors of IHEs from both governing and participating states as well as from higher education associations, met. During that meeting, they approved a decision to base mathematics college and career readiness determinations on an expanded Algebra II or Integrated Mathematics III examination. The expanded assessments will incorporate key content from the prior two courses. PARCC plans to pursue research to determine whether incorporating scores from all three mathematics assessments improves the predictive power of the overall score in indicating likelihood of student success in college and careers. If data warrant it, the consortium could later phase in a score combining all three mathematics assessment results into the college and career readiness determination, but that will not be the case initially.

ASSESSMENT DEVELOPMENT

In August 2012, PARCC publicly released item prototypes developed during the first and second years by two public research universities, the Dana Center at the University of Texas (Austin) and the University of Pittsburgh. These items, which were tested on small groups of students through cognitive labs, provided the first public sample of the expectations of the new assessment system. The prototypes highlighted the instructional shifts that the content standards emphasize, including close reading and writing using evidence from complex academic text in English language arts/literacy as well as clarity of focus, coherence, and rigor in mathematics. Releasing the item prototypes in August 2012 allowed PARCC to share them with educators prior to the start of the 2012-2013 school year so teachers could use them while planning instruction in the 2012-2013 school year. As will be further explained in the Professional Capacity, Outreach, and Communications section of this report, PARCC also presented these prototypes at its Educator Leader Cadre meetings in late summer 2012 as concrete resources for educators and as a way to receive early feedback on them. PARCC reported positive reception for these items, as the rigor and utility of the assessments became clearer. The item prototypes provided clear examples not only of the assessments and item types to expect from PARCC but also of the kinds of instruction teachers will need to use to make sure students master the knowledge and skills the assessments will measure.

In June 2012, PARCC finalized contracts with ETS and Pearson (and a number of sub-contractors with each organization) for the summative item development. PARCC's procurement method permitted the consortium to award contracts to more than one organization and to create a two-phase approach where the consortium would approve ETS or Pearson to participate in phase two of item development only if they provided quality products in phase one. Given that item writing did not begin until summer 2012, two months after planned contract execution in April 2012, the consortium necessarily established an ambitious timeline to produce approximately half of the items for the operational assessment in the first year of the contract (i.e., from June 2012–June 2013). Ensuring the quality of the items while developing such a large number of items in the compressed timeline requires regular, intensive item review periods. The consortium draws state and local staff, including teachers, to examine passages and items to make sure the items and passages (a) measure the content standards they are intended to measure and provide the evidence they are intended to show and (b) are free from bias. The item development work is critical and will remain a central focus during year three.

In year two, a working group of state staff focused on accessibility, accommodations, and fairness as well as a group of external technical experts on the topic began drafting and reviewing potential accessibility

and accommodations guidelines.[5] Consortium leaders also participated in meetings with the consortia developing assessments for students with the most severe cognitive disabilities (through the General Supervision Enhancement Grants, or GSEGs) as they clarify participation guidelines that will determine which students are eligible for the GSEG assessments (all students not eligible for those assessments will need to take the PARCC or other state assessments).

COLLEGE- AND CAREER-READINESS PERFORMANCE LEVEL DESCRIPTORS
In June 2012, PARCC released draft policy-level performance-level descriptors (PLDs) for public comment. These draft descriptors provide a glimpse into the way the consortium is planning to define college and career readiness. The draft included five achievement levels; a score of four or five on the designated high school assessments would indicate college readiness. The consortium intends to set an achievement level for the designated high school assessments such a student earning a score at or above a four would have a 75 percent likelihood of receiving a C or better in an entry-level college course for the corresponding subject area. Consortium leaders were encouraged by early comments that seemed to indicate commenters' comfort with the broader concepts displayed in the draft PLDs, such as employing five achievement levels. In October 2012, the Governing Board, in conjunction with the ACCR, approved a revised version of the PLDs, which incorporated feedback from the public comment period. While this version included some changes in specific language describing the various scoring levels, the basic concepts remained similar to the initial draft.

RESEARCH
During the second year of the grant, PARCC continued to convene its technical advisory committee (TAC), which is comprised of nationally recognized assessment experts. The TAC provides advice to the consortium on validity, reliability, and operational topics at its three annual meetings. In year two, these meetings occurred in December 2011, July 2012, August 2012, and December 2012. At the December 2011 TAC meeting, the consortium sought feedback on the assessment design and test blueprints to be included in the item development solicitation. The TAC also presented white papers commissioned of its members regarding achievement standards-setting considerations, performance level descriptors, fairness in assessing all students, and methods for measuring student growth using PARCC assessment results. A total of eight papers are available at http://www.parcconline.org/technical-advisory-committee. They contribute to the field of educational assessment and provide information on how PARCC is considering complex technical challenges of building an assessment system. The July and August 2012 meetings continued the discussions on growth measures and performance level descriptors. The TAC also focused on scaling, scoring, and equating; cognitive complexity; item quality; and the consortium's overall research agenda in those summer 2012 meetings.

During year two, PARCC developed a plan for particular studies that it will undertake during the life of the grant and after the first operational administration. The consortium attempted to contract for several studies in April 2012 but did not award a contract. Through the end of year two, few research projects are underway. Some research projects will take place through the item development contracts and some will be done through the assessment administration contract, executed in May 2013.

LESSONS LEARNED
PARCC made progress in item development during year two by releasing item prototypes, holding cognitive laboratory sessions, defining the performance levels at which the consortium will report results, executing item development contracts, and beginning item development and item reviews. While progress

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[5] To manage specific content and functional issues, PARCC convened working groups, both committees of internal (state) staff in operational working groups (OWGs) and external experts on technical working groups (TWGs). For more information on the leadership structure, please see the governance section of this report. PARCC released a draft Accessibility and Accommodations Manual for public comment in spring 2013.

during year two has addressed critical assessment development areas, many steps in these processes were delayed. Given the interdependent nature of assessment development, each delay has a compounded effect. To ensure success, PARCC must redouble its focus on timely execution.

LOOKING AHEAD

Year three will be a critical phase for assessment development. Not only must the consortium complete item development for a large portion of the items needed for operational testing, but PARCC will also conduct research during the spring, summer, and fall of 2013 to better understand how students interact with various item types and whether they are fair, reliable, and accessible, and measure the knowledge and skills they are intended to measure. PARCC will also plan for a broader field test in spring 2014. Further developing and scoping specific research projects and contracting for those to be executed during the grant period will also need to occur.

The consortium plans to test items in several ways. The summative item development contracts include small-scale cognitive laboratories that give developers an initial window into the way students interact with items. In year four of the grant (spring 2014), PARCC will administer a field test.

PARCC will also continue work on the PLDs, developing grade- and subject-specific PLDs through grade-band panels, which further specify the content students are expected to master to each level of achievement. These will also undergo public comment and subsequent approval by the Governing Board including the ACCR. The consortium will use, and continue to refine, the PLDs in the standard-setting process following the first operational administration of the assessment.

Professional Capacity, Outreach, and Communications

The extent to which the consortium is supporting member states in implementing rigorous college- and career-ready standards, supporting educators in implementing the assessment system, and informing and building support among the public and key stakeholders.

During year two, PARCC continued to support state and local capacity-building, engaged across the elementary and secondary and higher education sectors, convened cohorts of educator leader cadres, and communicated broadly. Given the wide range of impacted stakeholders, the consortium will continue and expand its engagement efforts throughout the development and implementation process.

PROFESSIONAL CAPACITY
In year two, PARCC held the first convenings of the Educator Leader Cadres. These groups of 24 educator representatives from each PARCC state (both governing and participating states) meet virtually and in person to learn about the PARCC resources and assessment system, create a system of feedback loops for states and PARCC, and serve as implementation leaders in their states and districts. These representatives may be classroom teachers, school leaders, district leaders, state curriculum leaders, higher education faculty, or other appropriate individuals who can effectively disseminate information about the assessment system to school-based staff, the public, and other stakeholders in their region. The consortium provided recommendations indicating the qualifications states should look for in nominating individuals for Educator Leader Cadres, such as commitment to the work, leadership skills, interpersonal skills, team orientation, interest in pedagogical and curriculum development work, innovation and creativity, and facility with technology. All but two participating states sent delegations. Since the first meetings for PARCC Educator Leader Cadres took place in late summer 2012, PARCC was able to share item prototypes directly with those groups to better disseminate information about what items will look like and to get immediate feedback on those sample items. The Educator Leader Cadres represent a valuable way for PARCC to communicate with practitioners and respond directly to their needs and questions.

PARCC released its Model Content Frameworks for English language arts and mathematics in year one; the consortium took additional public comment during the summer of 2012 to continue improving the utility of these resource for educators. The consortium released revised versions in summer (English language arts/literacy) and fall 2012 (mathematics) to help teachers and instructional leaders as they begin the transition to teaching to the new content standards. School, district, and state leaders can also rely on the frameworks as they plan for and implement their transition to the CCSS.

The consortium has found it useful to convene technical issues and policy working groups (TIPs), groups of state leaders and technical experts that address particular issues related to the development and implementation of PARCC assessments, in both years one and two. TIPs convene as needed to address cross-cutting and singular topics, often meeting only once. During year two, PARCC convened TIPs to address transition plans for states that use high school end-of-course assessments as part of their graduation requirements, rural challenges to implementing the new standards and assessments, and educator evaluation based on new standards and assessments.

In addition, PARCC held one Transition and Implementation Institute session in year two. States met in March 2012 to discuss and refine state and local transition plans and focus on coordination with key stakeholders. Consortium leaders, in collaboration with Education First, provided a rubric for states to use in gauging the quality of their transition plans. The consortium also built on the implementation workbook introduced through the two Transition and Implementation Institute sessions PARCC held in year one.

COMMUNICATIONS

During year two, PARCC continued to communicate about the work underway. As requests for information and presentations expand, the consortium works to identify local and regional leaders who can provide updates and information to their colleagues. PARCC staff and state leads continue regular speaking engagements. The consortium shares substantial information about all aspects of the work through its public website at www.parcconline.org, its social media presences, and communications cards with information on key aspects of the assessment system and development process. PARCC also drafts communication templates around specific topics to support state and local leaders in information dissemination. During year two, PARCC began holding stakeholder briefings, both general sessions and sessions tailored for stakeholders interested in issues specific to students with disabilities and English learners. The consortium also distributes a monthly newsletter and has worked to establish relationships with state public information officers.

PARCC managed the communications around several major releases during year two, including preliminary technology specifications in April 2012, updated Model Content Frameworks in summer and fall 2012, the item prototype release in August 2012, and college- and career-ready policy level descriptors in October 2012. These efforts provided some necessary information to interested stakeholders.

Year two saw an increased need for PARCC internal communication within and across working groups, between states and Achieve, and across state leadership. To address these needs, PARCC launched a SharePoint site to allow state staff as well as Achieve and other contractor staff to share resources and work more easily. The individuals in each state leading the work in the consortium (Leadership Team[6]) met regularly on conference calls. This increased in year two with in-person meetings of state leads occurring monthly. The consortium also continued hosting quarterly Governing Board meetings for chief state school officers from governing states.

HIGHER EDUCATION ENGAGEMENT

In year two, as in year one, PARCC conducted meetings in member states that convened postsecondary educators and leaders to build understanding of and support for PARCC. In particular, the consortium sought feedback from the postsecondary community regarding the policy level performance level descriptors to ensure that they developed, framed, and communicated them in a manner that is consistent with higher education expectations of incoming students who are exempt from remedial coursework. Data from the annual performance report (APR) documenting higher education involvement in PARCC are provided below in figure three. Specifically, as of July 1, 2012, PARCC is working with 676 distinct institutions of higher education (IHEs)[7] that have committed to implementing policies that exempt from remedial courses and place into entry-level, credit-bearing college courses any student who meets the consortium-adopted achievement standard for college- and career-readiness. That achievement standard will be set collaboratively by K-12 and higher education leaders. The large number of IHEs that remain committed to PARCC indicate a strong level of support for the consortium.

PARCC continues to deeply and broadly engage university faculty and leaders while providing them relevant resources for use in their own communities. The collaborative engagement with the higher education community, including through their expanded role in voting on key matters for college-readiness (for more detail, please see the governance section of this report), lays the groundwork for ultimate realization of the goal that IHEs will exempt from remedial courses and place into credit-bearing

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[6] State leads are individuals identified by their states to serve as the primary point person regarding PARCC work for their states. Often, these individuals are assessment directors or the equivalent in their states.
[7] Changes in the number of IHEs working with PARCC since the application and the year one report are due primarily to changes in state membership.

courses students who meet the PARCC college-ready achievement standard for the final high school summative assessments in mathematics and English language arts/literacy. PARCC also made funds available to governing states to help them fund positions, portions of positions, or travel/release time to facilitate higher education collaboration with PARCC. The consortium has effectively capitalized on this valuable opportunity for collaboration.

Figure 3. Percentage of direct matriculation students in PARCC states enrolled in IHEs that are working with PARCC[8]

Data as of July 1, 2012, submitted by the consortium

- Percentage of direct matriculation students in public IHEs enrolled in IHEs working with PARCC
- Percentage of direct matriculation students in public IHEs enrolled in IHEs not working with PARCC
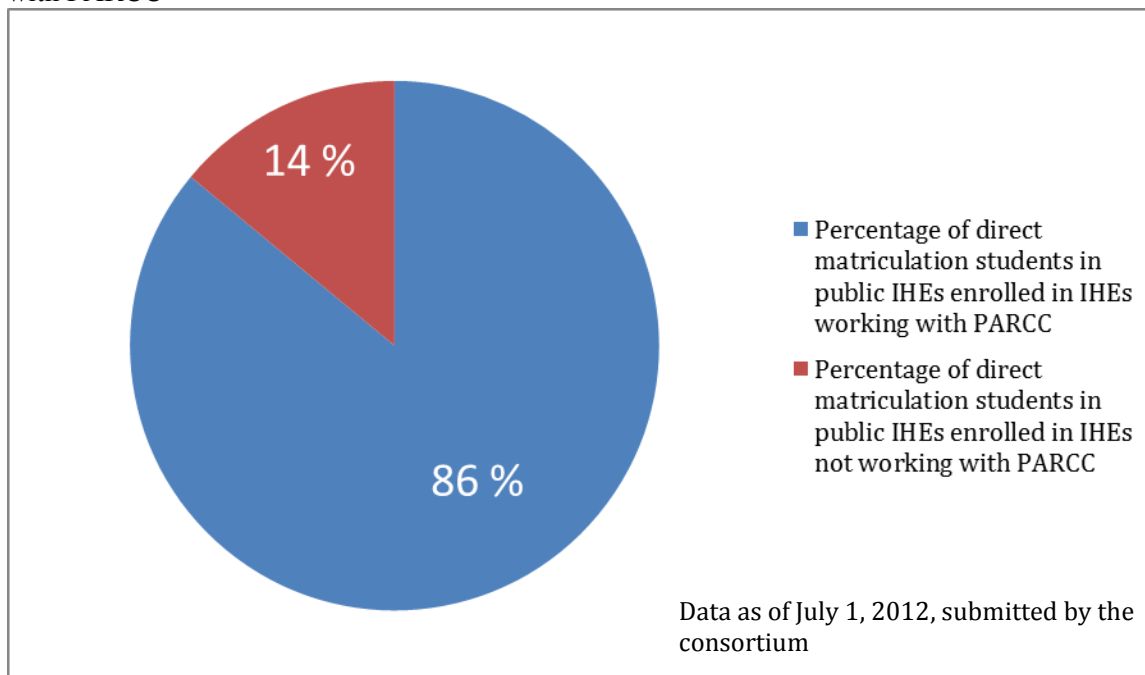
LESSONS LEARNED

Over the course of the second year, it became increasingly clear that educators, parents, and the public need more information about the consortium's progress and the design of the assessment system. In December 2012, K-12 state leads from each governing state identified short-term strategies they could employ to expand communications resources, such as updating materials available on the website and expanding the availability of general information resources. During year two, it also became increasingly evident that the consortium would benefit from greater attention to the area of communications. To that end, PARCC discussed expanding the work of its communications working group. Still, additional staff capacity in this area will augment the consortium's ability to share timely information in a thoughtful manner.

Several of the components of the assessment system, such as the Partnership Resource Center and design work related to the diagnostic and mid-year assessments, were necessarily delayed as the consortium focused on finalizing blueprints for the summative assessment and began writing and reviewing items. The work undertaken in year two should inform the development of such resources during the rest of the grant.

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[8] "Direct matriculation student" means a student who entered college as a freshman within sixteen months of graduating from high school.

PARCC intends to expand the scope and reach of its communications efforts during year three. The consortium will continue to convene Educator Leader Cadres to engage groups of educators by providing targeted professional development. These sessions will equip a small group of school-based staff and stakeholders, as well as administrators and postsecondary faculty, with critical information about transitioning to new standards and assessments so they can help serve as ambassadors in their states. In addition, PARCC anticipates expanding its arsenal of online tools and resources, such as online training modules for teachers about the assessment components and using assessment results. Professional learning modules will give educators more detail about the assessments in development. PARCC will also continue to continue to engage and brief national organizations and stakeholder groups at both external and PARCC-sponsored events.

The consortium will continue to convene TIPS over the course of the development process to address policy issues related to the assessment system. PARCC will finalize key administration procedures, such as the test window, the test length, the participation criteria, and the development of the accessibility and accommodations policies, which will be released for public comment before being finalized.

In year one, PARCC held two Transition and Implementation Institutes that allowed states and districts to begin planning their individualized transition path to new standards and assessments. The consortium held one such event year two and will convene one more Transition and Implementation Institute to give states and districts the opportunity to gauge their implementation efforts to date and to manage against and refine plans going forward. Diverse representation at that institute will create space for topic-specific discussions as well as state- and district-specific work.

Technology

The extent to which the consortium is using technology to the maximum extent appropriate to develop, administer, and score assessments and report results.

PARCC is developing an assessment system that will be technologically administered. Such assessments will reflect the skills and knowledge students need in college and the workforce. Administering assessments this way also provides more timely feedback to teachers, students, parents, and other appropriate stakeholders. As such, technology development and deployment is a central aspect of the work.

During year two, PARCC technology work focused on collecting information about current state technology hardware and beginning to map out the architecture that will be a blueprint for system development. PARCC also participated in the Common Education Data Standards – Assessment Interoperability Framework (CEDS-AIF) process designed to support the consortia in their development of interoperable technology standards, consistent with grant requirements.

DISTRICT AND SCHOOL TECHNOLOGY READINESS

PARCC member states are working to increase districts' and schools' technological capacity so that they can provide instruction that will equip students with the 21st century skills they need to be successful in college or the workforce. Districts and schools will also use that expanded capacity to administer the computer-based assessment system in the 2014-2015 school year. Improving and increasing technology in schools and districts is an issue that goes beyond the development of the consortium's assessment system, but PARCC must play a key role to support member states as they manage this transition. To support states and districts in preparing for the technology aspect of PARCC assessments, the consortium released a white paper in April 2012 that included suggested strategies for expanding technology capacity. The report provided case studies of various state contexts to demonstrate a range of scenarios.

In conjunction with Smarter Balanced, PARCC released specifications for new hardware purchases in April 2012. The specifications defined for states, districts, and schools what capacity new hardware should have to support the PARCC assessment system. Importantly, the specifications for new hardware identify large tablets with at least a 9.5 inch screen (including the iPad second generation and later) as being able to administer the PARCC assessments. In December 2012 and February 2013, PARCC provided additional guidance to states and districts about the minimum specifications for any hardware, whether new or existing. Generally, most technological devices currently available in schools, including computers running Windows XP, will support the assessments. The consortium will develop a phase-out plan for the oldest technology, but those devices and older operating systems will support assessment in the initial years. Table one below identifies the PARCC technology specifications. In conjunction with the below specifications, per the PARCC technology specifications and guidance, "all devices used for PARCC assessment administration must have the administrative tools and capabilities to 'lock down.' Features that will need to be controlled during test administration include, but are not limited to, unrestricted Internet access, cameras (still and video), screen capture (live and recorded), email, instant messaging, Bluetooth connections, application switching, and printing."[9] PARCC and Smarter Balanced have been in contact with technology providers and believe this to be an attainable goal.

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[9] As stated in the PARCC Technology Guidelines, updated February 2013, available at
http://www.parcconline.org/sites/parcc/files/PARCCTechnologyGuidelines2dot1_Feb2013Update.pdf.

Table 1. PARCC technology specifications

Element	Minimum PARCC Requirements for Current Computers[1][2][3]	Recommended PARCC Specification for New Purchases
Bandwidth – External connection to the internet	To be determined by October 2013	100 kbps per student or faster
Bandwidth – Internal school network	To be determined by October 2013	1000 kbps per student or faster
Connectivity	Computers must be able to connect to the Internet via wired or wireless connections.	Computers must be able to connect to the Internet via wired or wireless connections.
Screen size	9.5 inch screen size or larger	9.5 inch screen size or larger
Screen resolution	1024 x 768 resolution or better [1]	1024 x 768 resolution or better [1]
Input device requirements [2]	Keyboard Mouse or Touchpad or Touchscreen	Keyboard Mouse or Touchpad or Touchscreen
Headphone/ Earphone and Microphone Requirements	Headphones/Earphones Microphone Headphones/earphones are required for all students for all PARCC assessments. Some student accommodations may also require headphones/ earphones (e.g., text to speech) and/or microphones (e.g., speech to text, voice controls).	Headphones/Earphones Microphone Headphones/earphones are required for all students for all PARCC assessments. Some student accommodations may also require headphones/ earphones (e.g., text to speech) and/or microphones (e.g., speech to text, voice controls).
Memory	512 MB of RAM	1 GB RAM or greater
Windows – for desktop, laptop, netbook, or thin client/VDI computers	Windows XP – Service Pack 3	Windows 7 or newer
Mac OS - for desktop, laptop, netbook, or thin client/VDI computers	Mac OS 10.5	Mac OS 10.7 or newer
Linux	Ubuntu 9-10, Fedora 6	Ubuntu 11.10, Fedora 16 or newer
Chrome OS	Chrome OS 19	Chrome OS 19 or newer
Windows – for tablets	Windows 8	Windows 8 or newer
Apple iOS – for tablets	iPad 2 running iOS 6	iPad 2 running iOS 6 or newer
Android	Android 4.0	Android 4.0 or newer

Source: http://www.parcconline.org/sites/parcc/files/PARCCTechnologyGuidelines2dot1_Feb2013Update.pdf

[1] Computers must accommodate the 1024 x 768 screen resolution minimum without panning. PARCC recognizes that some netbook computers may have screen resolutions slightly less than the 1024 x 768 minimum, yet may meet all other minimum requirements. Depending on netbook model specifics, school technology administrators may be able to reset screen resolution to meet PARCC guidelines. By October 2013, following final test design, PARCC will establish a means for schools to evaluate whether particular netbook devices are able to display PARCC assessment items without requiring students to scroll or pan.

[2] The input device must allow students to select/deselect, drag, and highlight text, objects, and areas. The input device must allow students to enter letters, numbers, and symbols and shift, tab, return, delete, and backspace. To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during assessment administration. Other assistive technologies may be needed for students requiring accommodations. PARCC will release Accessibility Guidelines and Accommodations Guidelines in June 2013.

[3] Note: PARCC will issue further clarifying guidance regarding Windows RT and browser requirements for computers running Windows XP. Smaller tablets (with screen size less than 9.5"), e-readers, and smart phones will not be supported and will not be compatible with PARCC assessments for operational administration in 2014-2015.

During the first year of the grant, PARCC collaborated with Smarter Balanced to contract for a technology readiness tool. This tool collects state, district, and school technology data. Now that the consortium has determined its minimum technology specifications, in year three the tool will provide a report comparing the school's, district's, and state's readiness to administer the PARCC assessments. In year two, the initial data collection took place during the spring of 2012. Since the consortia were still developing their device and network specifications, the tool did not immediately provide feedback about gap analysis between existing resources and those needed. The consortium created an optional reporting template for states that wanted to compare its overall readiness data to the consortia's data overall; PARCC did not release state-level reports. As of the end of 2012, neither PARCC nor Smarter Balanced had released data from the initial data release. On its own initiative, in summer 2012, Louisiana published district-level reports that compared the data reported by each district to PARCC's specifications new hardware purchases. The resulting reports also included strategies to help districts and schools expand technology capabilities.

Overall summary statistics from the spring 2012 data snapshot are available in table two and figures four and five below. As the data indicate, various states approached the data collection differently. Many states had more than 80 percent of schools submit data, but other states either did not publicize the tool or used it in a limited way. As shown in figure four, the majority of reported devices use Windows XP, an operating system that Microsoft does not intend to support after the spring of 2014. While the consortium's specifications permit computers that use Windows XP to administer the assessments in the 2014-2015 school year, PARCC notes that "computers meeting only the minimum specifications for the 2014-2015 assessment are not likely to be compatible beyond the 2015-2016 assessment. PARCC recommends that schools upgrade from the oldest operating systems and lowest memory levels as soon as possible."[10] Currently, the majority of the existing device stock takes the form of desktop or laptop computers, though schools and districts are increasingly deploying tablets in the classroom.

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[10] See http://www.parcconline.org/sites/parcc/files/PARCCTechnologyGuidelinesDecember2012.pdf, page 3.

Table 2. Technology inventory school-level completion

State	Number of Schools Submitting Complete Data	Percentage of Schools Completed	Number of Devices Reported
Alabama	0	0.00%	0
Arizona	676	34.60%	126,599
Arkansas	316	29.45%	68,734
Colorado	0	0.00%	204
District of Columbia	19	9.74%	0
Florida	0	0.00%	115,781
Georgia	2,207	99.37%	1,378,797
Illinois	0	0.00%	0
Indiana	1,498	80.49%	257,758
Kentucky	0	0.00%	0
Louisiana	1,016	82.20%	172,971
Maryland	1,138	82.76%	168,516
Massachusetts	1,145	66.72%	477,789
Mississippi	531	58.67%	53,875
New Jersey	2,503	107.29%	325,362
New Mexico	0	0.00%	0
New York	96	2.08%	32,846
North Dakota	145	30.15%	13,438
Ohio	1,208	32.98%	201,055
Oklahoma	1,173	65.57%	98,364
Pennsylvania	0	0.00%	1
Rhode Island	254	84.67%	49,153
Tennessee	1,140	66.96%	167,630

Source: Draft technology inventory data, as of July 2012 snapshot, based on Pearson's report to the consortia and data shared by PARCC.

Note: The percent of schools that entered data (second data column) is compared with 2009-2010 public data from U.S. Department of Education, Ed Data Express, as summarized by the Pearson report to the consortia. The Ed Data Express information is available online at http://www.eddataexpress.ed.gov/state-tables-report.cfm. If states reported on behalf of schools, results may show 0 schools reporting but still identify some reported devices. Variance in the number of schools since the 2009-2010 reference year and the 2011-2012 school year could also account for unusual percentages.

Figure 4: Operating systems in use in PARCC states as a percentage of total devices in PARCC states (draft data as of July 2012)
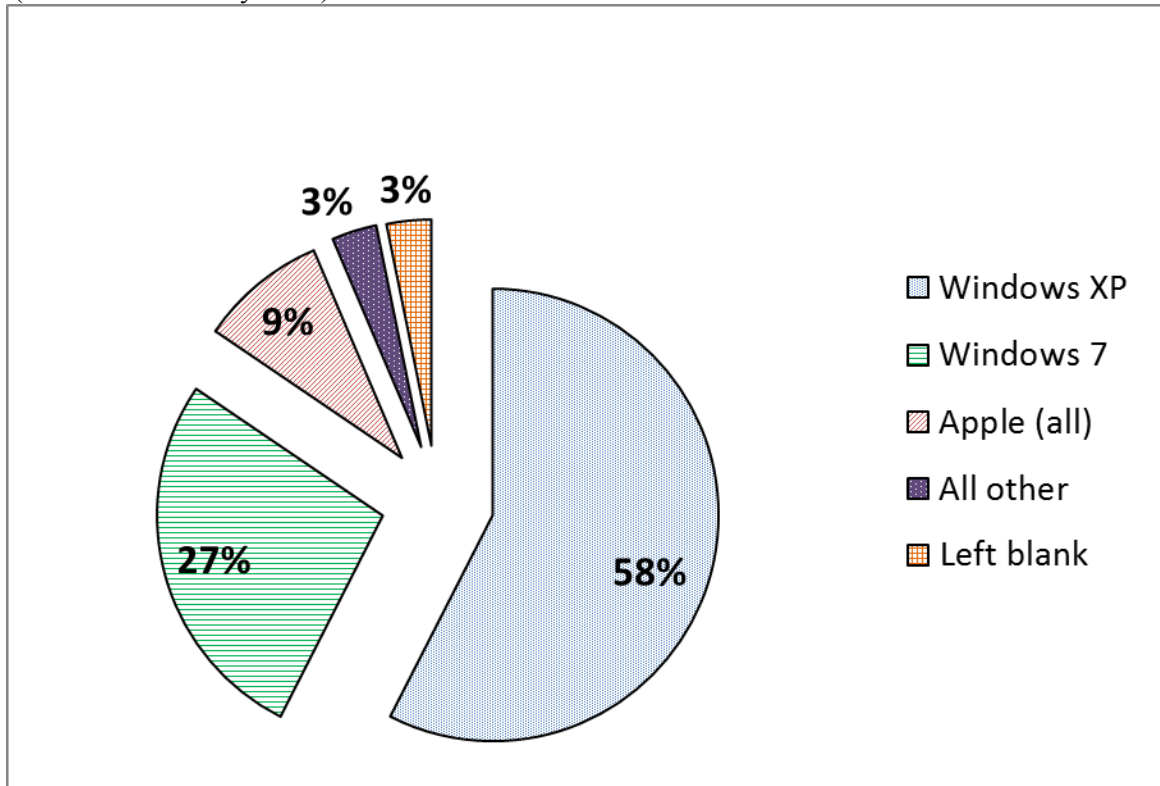
Source: Draft technology inventory data, as of July 2012 snapshot, shared by PARCC

Figure 5: Device types in PARCC states as a percentage of reported devices (draft data as of July 2012)
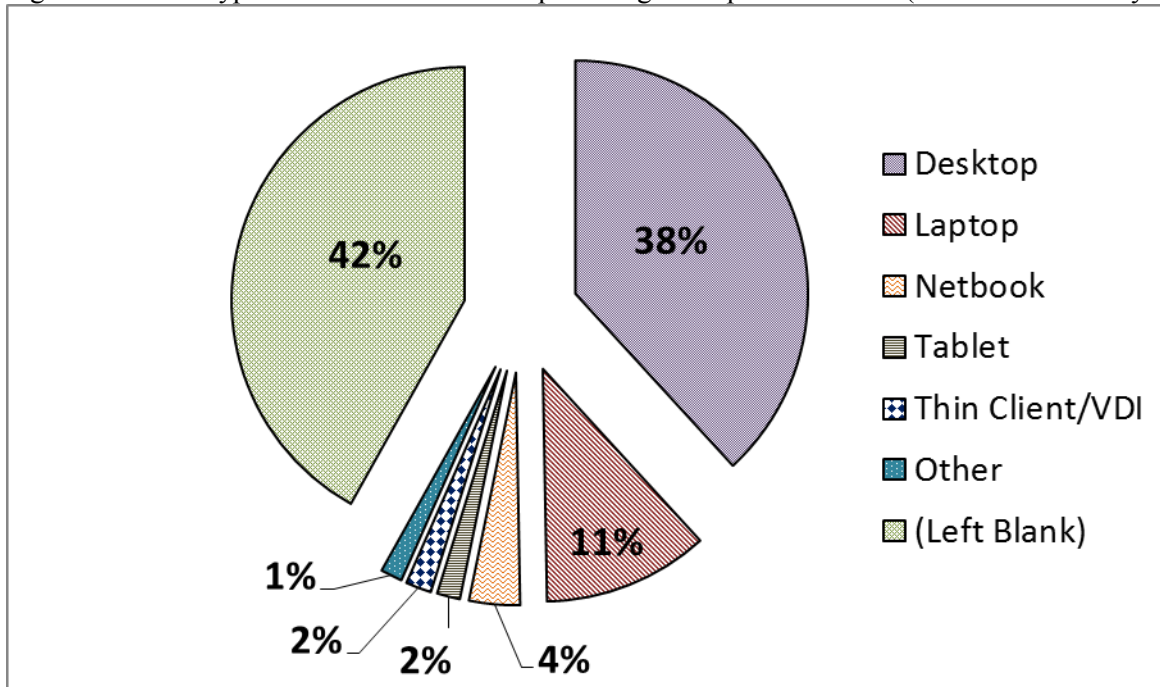
Source: Draft technology inventory data, as of July 2012 snapshot, shared by PARCC

INFORMATION TECHNOLOGY ARCHITECTURE

During year two, the consortium contracted for information technology (IT) architecture development, awarding a contract to Pacific Metrics with IBM as a sub-contractor. On August 21, 2012, PARCC presented the broad strokes of its technology architecture to state and district representatives. A final report has not been released. As of the end of 2012, the consortium had not yet begun to procure for the development of the components of the technology system identified in the architecture. In its initial approved application, PARCC anticipated completing technology platform development by the end of June 2012.

INTEROPERABLE TECHNOLOGY STANDARDS

To support continued innovation during and after the grant period in assessment delivery, scoring, data warehousing, and reporting systems, and in accordance with grant requirements, the consortia must develop all assessment items to an industry-recognized open-licensed interoperability standard that is approved by the Department during the grant period, without non-standard extensions or additions and produce all student-level data in a manner consistent with an industry-recognized open-licensed interoperability standard that is approved by the Department during the grant period. During year two, the Department sponsored initial collaboration through the Common Education Data Standards (CEDS) initiative around interoperable technology standards for assessments, including PARCC, Smarter Balanced, and the two consortia of states developing new alternate assessments based on alternate academic achievement standards (National Center and State Collaborative and Dynamic Learning Maps).

CEDS is a national collaborative effort to develop voluntary, common data standards for a key set of education data elements to streamline the exchange and comparison of data across institutions and sectors. The National Center for Education Statistics (NCES) leads the process and convened the consortia as well as vendors to craft an initial map of which technology standards best suit different aspects of information exchange for assessment systems. This framework, the Assessment Interoperability Framework (AIF), is the result of collaboration between two external standards entities, the SIF Association and IMS, and their members, which include many assessment companies. After numerous stakeholder and vendor conversations, the first draft of CEDS-AIF elements was released for public comment in early fall 2012. After reviewing the comments, a revised version of the CEDS-AIF standards was publicly released in winter 2012, and included use cases for the technology standards, best practices, and case studies. The CEDS contractors facilitated vendors' testing of the technology standards. CEDS-AIF is one component of the larger CEDS work and was included in the CEDS version 3.0 release in early January 2013. In year three, PARCC is creating technical specifications and implementation guidelines that will help ensure alignment to these interoperable technology standards.

LESSONS LEARNED

Since states and districts need to understand the requirements to administer the computer-based assessment system with sufficient time to procure any additional devices or improve bandwidth or internal wiring in schools, PARCC established minimum technology guidelines in April 2012 which they updated in December 2012.

During year two, PARCC hired an Associate Director of Assessment Technology, which increased consortium capacity regarding technology development and implementation. However, the multi-faceted work may demand additional staff capacity.

Though PARCC worked to establish a technology architecture design, it is not clear that the architecture is complete and the consortium had not yet begun to procure for the development of the technology system. This may limit the consortium's options regarding the platform or its ability to develop an interoperable system.

Year three will be essential to PARCC technology development. The consortium will complete its second data snapshot regarding the technology readiness of its states and districts. This will include an analysis of the gap between the district's capacity and the minimum requirements. The consortium will also release a planning tool in spring 2013 for districts and schools to evaluate their capacity to administer the assessments via a computer in the 2014-2015 school year. In addition, PARCC will release additional information about the technology capacity needed for assessment administration as the consortium begins to develop the platform it will use to administer the assessments. Deploying the gap analysis portion of the technology readiness tool will support states, districts, and schools as they expand their resources.

Importantly, the consortium must begin developing, implementing, and testing the technology that will support the assessment system. It is vital that the consortium makes substantial progress in 2013 to ensure that the technology will work for the field test in spring 2014 and the first operational assessment in the 2014-2015 school year.

Governance

The consortium's approach to internal organization and capacity, project management, and procurement to permit timely decision-making and the efficient development and implementation of its assessment system.

Building a rigorous, common, large-scale assessment system that measures not just what students know but the skills students need to build for success in college and careers is an immense opportunity and a substantial challenge. Delivering on the goal of a next-generation assessment system as a group of 22 states compounds the complexity of this opportunity. Success depends critically on careful coordination of policy and crisp project management combined with deep engagement and support within and across the member states.

Over the course of the second year, PARCC used the organizational structure it created in year one. PARCC relied on state leaders, both chief state school officers and state assessment and content experts, for substantive project execution. Staff from the project management partner, Achieve, also provided policy analysis and framing, coordinated various topical areas of the work, liaised with the vendors, and planned and staffed convenings. At the close of year two, PARCC was endeavoring to develop a leaner, more flexible organizational structure to manage the rapid phase of development required to successfully build its assessment system.

LEADERSHIP

PARCC benefits from a deeply engaged Governing Board, which consists of chief state school officers from each governing state who make major policy decisions. The Governing Board meets quarterly to address policy and operational issues, including electing a chair to serve a one-year, renewable term. Mitchell Chester of Massachusetts served in this role for the first year, was re-elected to a second term, and was further selected by his peers for a third term. In year one, the Governing Board voted to add three representatives of higher education to the Governing Board for votes addressing matters directly related to postsecondary institutions. During year two, the consortium voted to have a representative of higher education in each governing state join the Governing Board for "key matters" affecting higher education, such as college- and career-readiness determination policy. During year one, the PARCC Governing Board also established a Steering Committee, comprised of up to nine Governing Board members elected by the full Governing Board, which met between Governing Board meetings to address interim issues.

The consortium relies on the Governing Board and Steering Committee for decision making. In instances during each of the first two years in which there was a change in state leadership, PARCC required and received a formal recommitment from each new administration. This ensures strong continued engagement and buy-in from PARCC's member states.

The consortium operates a K-12 Leadership Team consisting of state representatives other than the chief state school officer from each governing state, such as deputies to the chief, state assessment directors, or other state agency officials with expertise in assessment, curriculum and instruction, or accountability. The Leadership Team manages day-to-day operations and decision-making, convening weekly by phone and several times a year in person. Partway through the second year, the Leadership Team endeavored to streamline its own processes by establishing a Leadership Team Steering Committee. This steering committee was comprised of a subset of the Leadership Team that chair the OWGs. The states elected James Mason, Director of Assessment in Mississippi, as chair of the Steering Committee. The Leadership Team Steering Committee met weekly by phone and the full Leadership Team met monthly in person to share progress on particular work streams, prepare recommendations on policy decisions for the Governing Board, and advance working group projects.

During the second year, PARCC continued its substantial efforts to engage higher education. As described above, PARCC specifically incorporated representatives of higher education into its decision-making leadership in order to align the work of assessment design and development with the needs and expectations of the IHEs. IHEs will ultimately use the data from PARCC assessments to exempt from remedial courses and place into first-year, credit-bearing college courses in English and mathematics any student who meets the consortium-adopted achievement standard for college-readiness. As this report details in the Professional Capacity, Outreach, and Communications section, the consortium has continued to bring the K-12 and higher education communities together while deeply engaging each one.

To those ends, in addition to participating on the Governing Board, the PARCC Advisory Committee on College Readiness (ACCR), composed of presidents and chancellors of IHEs from both governing and participating states as well as from higher education associations, continued to meet to address high-level higher education policy at semi-annual meetings. PARCC continued the work of the Higher Education Leadership Team (HELT), akin to the K-12 Leadership Team, to manage ongoing post-secondary operations. This group includes an IHE representative from each PARCC state (both governing and participating) and meets at least bi-weekly by phone.

To ensure sufficient support for PARCC's activities during the life of the grant, the consortium provides funding to all governing states for both elementary and secondary and higher education PARCC-related support. Though available to all governing states, some states took greater advantage of this resource than did others.

Project management has been a challenge for the consortium over the first two years. The scale and scope of the PARCC project, the many interdependencies, and the number of parties involved have challenged consortium leadership. PARCC has realized the need for stronger project management to ensure key deadlines are met in order for the project to be successful. It is revising its structure and comprehensive project plan to increase capacity and address these challenges. Managing aggressively against a clearer project plan will be critical as the consortium fully develops and rolls out the assessment system.

WORK GROUPS

To manage specific content and functional issues, PARCC convened working groups, both committees of internal (state) staff in operational working groups (OWGs) and external experts on technical working groups (TWGs). During year two, as part of the Leadership Team efforts to streamline the work, PARCC organized the myriad OWGs into six committees, focused on: 1) Project Management and Operations; 2) Summative Development; 3) Non-summative Development; 4) Research and Psychometrics; 5) Technology; and 6) CCSS Implementation and Educator Engagement. The consortium named a state chair and an Achieve staff lead for each OWG and each committee overall. These committees and their working groups meet according to schedules appropriate to their content area, and the year two in-person monthly Leadership Team meetings provided a convenient venue for face-to-face effort. In addition, PARCC established rapid response feedback groups of state content experts for each content area that were actively involved in the iteration on the Model Content Frameworks and incorporated public input into the Frameworks during the spring and summer of 2012. The consortia also continued to convene its TAC, which meets three times annually, for expert psychometric and technical input. The substance of the work is accomplished through the efforts of these committees. Given the breadth of work incumbent on the consortium, and, by extension, the committees, the successful operation of these working groups is paramount to overall consortium success.

<u>PROCUREMENT</u>
During year two, PARCC contracted for some critical goods and services but continued to face procurement delays. In June 2012, PARCC executed item development contracts through Florida, the fiscal agent, with Pearson, Inc. and the Educational Testing Service (ETS) respectively, and their sub-contractors.[11] Given the structure of the solicitation, the consortium made multiple awards for an initial phase of development (through June 30, 2013) with contracts for the second phase of development contingent on performance during the first phase. Accordingly, PARCC has the flexibility to continue working with either or both vendor(s) after initial item development.

The consortium released the first few solicitations through Florida, the fiscal agent state for PARCC. In April 2012, Florida and Indiana entered into a memorandum of agreement (MOA), consistent with the initial Race to the Top Assessment notice inviting applications (NIA), the states' memorandum of understanding joining the consortium (MOUs), and PARCC by-laws, to allow Indiana to procure on behalf of the consortium. Subsequently, Indiana released a solicitation for assessment administration and research for the pilot and field test. In August 2012, Indiana announced an intent to award a contract; however, due to problems with the procurement process, Indiana had to re-release the solicitation in October 2012. Indiana expected to execute this contract in early 2013.[12] PARCC has not yet released several procurements, such as those related to the technology system and the research plan, that were expected to be released in years one and two.

Assessment development is, by nature, composed of interconnected tasks. Therefore, these procurement delays place the consortium at risk for successfully completing all activities in its plan during the grant period and impact the consortium's ability to execute future key activities, such as pilot and field testing.

<u>LESSONS LEARNED</u>
PARCC learned many critical lessons during year two relating to governance. First, the consortium identified the need for more nimble decision making, and took related action by establishing the Governing Board Steering Committee, the Leadership Team Steering Committee, and the Leadership Team Chair. The consortium engaged in consortium self-reflection and continuous improvement identifying additional capacity needs in project management and communications and took steps to mitigate risk. The consortium attempted to address problems with procurement by working with additional states to lead some procurement efforts. The consortium is currently exploring other methods to improve its capacity to procure the services necessary to support the assessment system.

Finally, during year two, PARCC took formal steps to include higher education leaders in engagement in its decision-making regarding the matters that most directly impact them. Expanding from three voting higher education representatives to a voting higher education representative from each of the 19 governing states demonstrated PARCC's commitment to bringing higher education directly into the work of developing and assessment system that demonstrates student readiness for college and careers.

<u>LOOKING AHEAD</u>
PARCC has committed to establishing a revised project plan and increasing its capacity to manage against it. The consortium will also determine viable options to procure needed goods and services. PARCC will continue to implement and, as needed, expand its risk management plan. The consortium will continue regularly convening the Governing Board, K-12 Leadership Team, ACCR, HELT, committees and working groups as well as convening state and district leaders for Educator Leader

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[11] Subcontractors for Pearson include the Council for Aid to Education, Knowbility, and SRI International. Subcontractors for ETS include CTB/McGraw-Hill, Measured Progress, the College Board, Carnegie Mellon University, MetaMetrics, and Clark Aldrich Designs, LLC.

[12] The assessment administration contract was executed and transferred to Florida for administration in May 2013.

Cadres (as described in the Professional Capacity, Outreach, and Communications section). PARCC will also continue collaboration across elementary and secondary and higher education. Careful management and coordination coupled with strong leadership are paramount to success.

PARCC will also continue work begun in year one to evaluate its plan for the sustainability of the consortium after the grant ends. Ongoing work will include replenishing the item bank; administering, scoring, and reporting results; coordinating policy conversations; and continuing the research efforts begun during the grant period. The consortium will need to determine its model for supporting those ongoing efforts and for managing joint decision-making following the grant period.[13]

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[13] In early 2013, PARCC established itself as a non-profit and applied for 501(c)(3) tax-exempt status as a means of beginning sustainability work.

Conclusion

The Race to the Top Assessment program supports the development of assessment systems that better reflect good instructional practice and support a culture of continuous improvement in education. PARCC is building an assessment system that will provide meaningful and timely information to support professional learning, program improvement, instructional enhancement, and school and educator evaluation. Successful development and implementation has and will continue to require an unprecedented degree of coordination and communication across all levels of education – teachers, schools, districts, states, higher education, and local, state, and national policymakers. Despite these challenges, a report released by CRESST in January 2013, *On the Road to Assessing Deeper Learning: The Status of Smarter Balanced and PARCC Assessment Consortia*, that evaluated available evidence and data from both consortia suggests that both are building assessment systems responsive to the goals of the program by assessing deeper skills and knowledge, including complex skills and problem solving, significantly more than current statewide assessment systems.[14] During year two, the consortium released item prototypes, aggressively began item development, engaged the higher education community, convened Educator Leader Cadres, released the technology specifications necessary to administer the PARCC assessment system, and refined the Model Content Frameworks.

SUCCESSES

- *Item prototypes*
  During year two, the consortium released sample item prototypes that provided the first evidence to the field of the way the assessments will reflect the instructional shifts of the CCSS. This tangible evidence is useful to educators and policymakers at every level and was an important step in communicating the work PARCC has been doing and sharing the expectations for what the assessment system will look like.

- *Performance level descriptors*
  PARCC successfully drafted policy-level performance level descriptors, including a preliminary college and career readiness determination. This effort included substantial collaboration across elementary and secondary and postsecondary levels so that the draft performance levels reflect shared expectations of K-12 and higher education. The consortium took public comment, conducted outreach to ensure substantial responses, and incorporated that feedback into the revised version. This framework will help the consortium as they set expectations for the new assessments.

- *Educator leader cadres*
  PARCC launched the groups of educators in Educator Leader Cadre gatherings that bring together state, district, and school staff. They serve as a valuable professional learning opportunity for Cadre members, provide the consortium with immediate feedback on progress, and develop a group of educators who can serve as ambassadors for the consortium in their state. As more information about the assessment system is available and schools and district interest increases, the twice-annual convenings of the Cadre members and periodic webinars will be an important opportunity for these educators to become even more active in sharing information with their own communities.

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[14] Herman, J.L. & Linn, R.L. (2013). *On the road to assessing deeper learning: The status of Smarter Balanced and PARCC assessment consortia.* (CRESST Report 823). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

- *Higher education engagement*
  During year two, the consortium strengthened and expanded its already impressive level of collaboration between elementary and secondary education leaders and higher education leaders and faculty. By both educating them about the work of the consortium and including them in consortium leadership for the purposes of defining college- and career-readiness, PARCC has made important strides toward ensuring that its final product is used for the intended purpose; that is, to provide evidence of student readiness for entry into credit-bearing college courses.

CHALLENGES
- *Project management*
  Project management for such a complex, interdependent project is an ongoing, and critical, challenge. PARCC needs tools and capacity to manage the project with greater attention to interconnected timelines.[15] Early delays placed additional pressure on the timeframes for completing critical milestones; to meet this challenge, PARCC must manage in an aggressive and streamlined way.

- *Procurement*
  In years one and two, PARCC faced numerous procurement delays and related issues. Both Florida and Indiana participated in procurement during year two but procurement delays continue to challenge the consortium and increase the risk to the consortium's successful completion of all components of its plan. PARCC must imminently implement strategies to successfully procure all needed goods and services in a timely manner to prevent any further slippage.

- *Assessment development*
  While the release of the item prototypes, the development of test blueprints, and the specification of policy level performance level descriptors represented important steps forward in assessment development, much more remains to build an operational assessment system. Item development began in year two, but the consortium's timeline for writing and reviewing items is ambitious; time spent revising the assessment design changes and finalizing test blueprints and task models means that year three will be a critical period for item development. The majority of all items to support the operational assessment will be developed in year three. Once items are developed, the consortium must test their performance with students and the way combinations of items on test forms assess student knowledge and skills. This critical research will determine the extent to which educators can rely on the validity and reliability of assessment results.

- *Technology*
  The PARCC assessment system is designed to be a computer-administered system. Building such a system, and supporting the transition to computer-based assessment, will require intensive effort at the consortium, state, and district levels. PARCC needs to expand its capacity in this area, both to ensure that it successfully completes its own technology initiatives and to support states and districts as they plan and execute transition work.

Moving forward, PARCC is taking steps to address these challenges. In year three, the consortium will:
- Improve and expand project management capacity;
- Establish a non-profit entity to support the long-term sustainability of the project;[16]
- Continue item development, with the majority of items being developed during year three;

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[15] In spring 2013, PARCC worked to incorporate additional project management capacity with non-grant funds.
[16] As described in a prior footnote, PARCC established a non-profit entity in spring 2013 to begin sustainability planning.

- Test items through item development research and cognitive labs to determine whether items, particularly new and innovative items, are fair, accessible, and reliable and whether they measure the skills and knowledge they are intended to measure;
- Report on the technology gaps for member states, districts, and schools between their current resources and those needed for successful PARCC administration;
- Define its technology platform strategy and begin executing against it; and
- Expand and continue to implement the risk mitigation plan.

Glossary

Accommodations means changes in the administration of an assessment, including but not limited to changes in assessment setting, scheduling, timing, presentation format, response mode, and combinations of these changes, that do not change the construct intended to be measured by the assessment or the meaning of the resulting scores. Accommodations must be used for equity in assessment and not provide advantage to students eligible to receive them.

Achievement standard means the level of student achievement on summative assessments that indicates that (a) for the final high school summative assessments in mathematics or English language arts, a student is college- and career-ready; or (b) for summative assessments in mathematics or English language arts at a grade level other than the final high school summative assessments, a student is on track to being college- and career-ready. An achievement standard must be determined using empirical evidence over time.

The **American Recovery and Reinvestment Act of 2009 (ARRA)** was signed into law by President Obama on February 17, 2009. This historic legislation was designed to stimulate the economy, support job creation, and invest in critical sectors, including education. The U.S. Department of Education received a $97.4 billion appropriation.

College- and career-ready (or readiness) means, with respect to a student, that the student is prepared for success, without remediation, in credit-bearing, entry-level courses in an institution of higher education (IHE) (as defined in section 101(a) of the HEA), as demonstrated by an assessment score that meets or exceeds the achievement standard for the final high school summative assessment in mathematics or English language arts.

Common Core State Standards (CCSS) are K-12 English language arts and mathematics standards developed in collaboration with a variety of stakeholders including states, governors, chief state school officers, content experts, teachers, school administrators, and parents. The standards establish clear and consistent goals for learning that will prepare America's children for success in college and careers. As of January 2012, the Common Core State Standards were adopted by 45 states and the District of Columbia.

Common set of college- and career-ready standards means a set of academic content standards for grades K-12 that (a) define what a student must know and be able to do at each grade level; (b) if mastered, would ensure that the student is college- and career-ready by the time of high school graduation; and (c) are substantially identical across all states in a consortium. A state may supplement the common set of college-and career-ready standards with additional content standards, provided that the additional standards do not comprise more than 15 percent of the state's total standards for that content area.

Direct matriculation student means a student who entered college as a freshman within sixteen months of graduating from high school.

English learner means a student who is an English learner as that term is defined by the consortium. The consortium must define the term in a manner that is uniform across member states and consistent with section 9101(25) of the ESEA.

Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust on-going teaching and learning to improve students' achievement of intended instructional outcomes. Thus, it is done by the teacher in the classroom for the explicit purpose of diagnosing where students are in their learning, where gaps in knowledge and understanding exist, and how to help teachers and students improve student learning. The assessment is generally embedded within

the learning activity and linked directly to the current unit of instruction. The assessments are typically small-scale (less than a class period) and short-cycle. Furthermore, the tasks presented may vary from one student to another depending on the teacher's judgment about the need for specific information about a student at a given point in time. Providing corrective feedback, modifying instruction to improve the student's understanding, or indicating areas of further instruction are essential aspects of a classroom formative assessment.

Governing state means a state that (a) is a member of only one consortium applying for a grant in the competition category, (b) has an active role in policy decision-making for the consortium, and (c) is committed to using the assessment system or program developed by the consortium.

Interim assessment is the term for the assessments that fall between formative and summative assessments. They typically evaluate students' knowledge and skills relative to a specific set of academic goals within a limited timeframe and are designed to inform decisions at both the classroom and school or district level. They may be given at the classroom level to provide information for the teacher, but unlike true formative assessments, the results of interim assessments can be meaningfully aggregated and reported at a broader level. As such, the timing of the administration is likely to be controlled by the school or district rather than by the teachers. They may serve a variety of purposes, including predicting a student's ability to succeed on a large-scale summative assessment, evaluating a particular educational program or pedagogy, or diagnosing gaps in a student's learning.

Invitation to negotiate (ItN) is a Florida procurement vehicle that allows some flexibility in procurement, including by permitting the state to issue multiple contracts based on a single ItN and the flexibility to communicate more directly with vendors during the negotiation phase.

On track to being college- and career-ready means, with respect to a student, that the student is performing at or above grade level such that the student will be college- and career-ready by the time of high school graduation, as demonstrated by an assessment score that meets or exceeds the achievement standard for the student's grade level on a summative assessment in mathematics or English language arts.

The **Partnership for Assessment of Readiness for College and Careers (PARCC)** is one of two consortia of states awarded grants under the Race to the Top Assessment program to develop next-generation assessment systems that are aligned to common K-12 English language and mathematics standards and that will accurately measure student progress toward college and career readiness.

The **Smarter Balanced Assessment Consortium (Smarter Balanced)** is one of two consortia of states awarded grants under the Race to the Top Assessment program to develop next-generation assessment systems that are aligned to common K-12 English language and mathematic standards and that will accurately measure student progress toward college and career readiness.

A **student with a disability** means, for purposes of this competition, a student who has been identified as a student with a disability under the Individuals with Disabilities Education Act, as amended (IDEA), except for a student with a disability who is eligible to participate in alternate assessments based on alternate academic achievement standards consistent with 34 CFR 200.6(a)(2).

Summative assessments are generally given one time at the end of some unit of time such as the semester or school year to evaluate students' performance against a defined set of content standards. These assessments typically are given statewide and these days are usually used as part of an accountability program or to otherwise inform policy.