# PARCC Lessons Field Test Learned



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## **Executive Summary**

More than 1 million students in nearly 16,000 schools participated in the spring 2014 PARCC field test. Fourteen states and the District of Columbia administered the test.

The primary purposes of the PARCC field test were to:

- Examine the quality of test questions and tasks;
- Evaluate assessment training materials and administration procedures;
- Evaluate the computer-based delivery platform; and
- Conduct research on a range of topics, including those that will inform the reporting of results from the first round of full testing.

The ultimate goal of the field test was to confirm that PARCC is a quality assessment program and to make improvements based on the experience prior to the 2014–15 administration, in which an estimated 5 million students will participate.

### SUMMARY OF KEY FINDINGS

With minor exceptions, the field test went very smoothly. Most students had sufficient time to complete the field test and were comfortable with the computer-based items, especially those students who practiced first with sample questions and tools designed to familiarize them with features of the online system. Likewise, schools that used the various tools, manuals, and training modules provided by the PARCC consortium reported fewer issues than those that did not — particularly in regard to technology.

#### **QUALITY OF TEST ITEMS AND STUDENT EXPERIENCE**

Item-level data from the field test indicate that a large majority of the items developed for the PARCC assessments over the past several years performed well. That is, students understood the questions and responded appropriately. Approximately 89 percent of the English language arts/literacy (ELA/L) questions and 78 percent of the mathematics questions were found eligible for the 2014–15 administration, mirroring results for other new assessment programs and providing ample test items for the administration.

Generally speaking, students across grades, even those in elementary school, were able to successfully use the computer-based test (CBT) delivery system, including keyboarding their answers to short and extended questions, scrolling through reading passages, and moving from one question to the next. In addition, students told observing researchers that they found the computer-based assessments engaging.

Other findings related to the student experience were:

- More than 90 percent of students said that they had sufficient time to complete the test.
- Approximately 90 percent of students said that they understood the directions on the ELA/L tests (both the computerbased and paper-based formats) and the mathematics computer-based test when read by the person who gave them the test. Eighty-three percent of students said they understood the instructions on the paper-based mathematics test when read by the person who gave them the test.
- Two-thirds of students said that they entered mathematics symbols and numbers with ease on the CBT.
- Approximately half of students said that it was easy to use the online calculator (which, nonetheless, is being revised for the 2014–15 administration).

#### **TECHNOLOGY PREPAREDNESS**

There were no system-wide technology issues during the field test. Most technology issues that did occur were local (e.g., firewall settings needed to be changed, computer settings needed to be adjusted, or students needed help logging in) — an expected result when school districts introduce computer testing for the first time, as was the case in most PARCC states. Most issues were also quickly and easily resolved.

Other findings related to technology preparedness were:

- More than two-thirds of test coordinators and test administrators conducted an infrastructure trial in their district before the field test.
- Almost two-thirds of test coordinators and administrators used data from the Technology Readiness Tool to prepare for the field test.

#### TRAINING MATERIALS AND ADMINISTRATION PROCEDURES

In some cases, test administrators reported that some directions, such as how to close out of online test sessions, needed clarification and that the test manuals could be shorter and clearer. Students and test administrators and coordinators requested some improvements to the equation editor, a computer-based feature that allows students to solve mathematics problems and explain their reasoning.

Other findings related to training materials and administration procedures were:

- Just over half (55 percent) of test coordinators reported that the student tutorial was useful for students to become familiar with PARCC items, tools, and functionalities of the computer-based delivery platform.
- Just under half (46 percent) of test coordinators and test administrators indicated that information in the test administration manuals was sufficiently comprehensive.
- Thirty-nine percent of test coordinators agreed that the process for setting up test sessions and registering students through PearsonAccess (the CBT delivery system) was straightforward and simple. Forty-five percent found PearsonAccess easy to use.

## SUMMARY OF KEY PLANNED IMPROVEMENTS

The PARCC states gained considerable information and insight through the administration of the PARCC field test and the analysis of information from student and educator surveys. The administration was successful — from the overall effective functioning of the testing and administration platforms to the student experience. A number of opportunities for adjustments and improvements did present themselves, and the PARCC consortium has been actively working to implement those improvements.

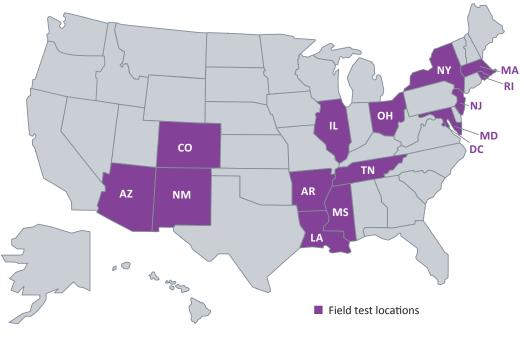
The steps that the PARCC states are taking to help ensure the success of the 2014–15 administration and all future administrations include:

- Revising manuals and training modules;
- Revising general directions on the tests, especially the mathematics tests, to make them clearer;
- Upgrading PearsonAccess and TestNav8 (the CBT delivery platform);
- Conducting a third-party verification and validation of TestNav8 performance;
- Revising tutorials to include a full array of tools, accessibility features, and item-computer interactions; and
- Expanding practice tests to include paper-based tests and additional components (performance-based and end-of-year assessments in both content areas).

## Introduction

### FIELD TEST BACKGROUND

Between late March and early June 2014, 14 states and the District of Columbia administered the PARCC field test. Nearly 16,000 schools participated, with 73 percent participating in the test online and 27 percent in the paper-based test (PBT). Schools were randomly selected to participate so that information generated by the field test would be representative of the student population in the PARCC states.



### FIELD TEST FEEDBACK

To evaluate the PARCC field test experience, the PARCC states conducted formal surveys of test administrators, test coordinators, and students. The surveys were designed to collect feedback on the training materials and manuals, as well as the student experience with technology and other aspects of the field test.

Feedback also was compiled through direct observation of the field test in approximately 61 schools, direct email communication received by the PARCC states from field test participants, and through social media channels (i.e., Facebook and Twitter).

### FINDINGS

The PARCC states have now analyzed this information and have identified lessons learned and improvements to be made. This report summarizes the key findings and describes the specific actions that the PARCC states will take going forward.

This level of public analysis and disclosure reflects the ongoing commitment by the PARCC states to be transparent as they develop the next generation of tests.

The areas of focus for this report are:

- Test items
- Student experience
- Technology preparedness
- Training materials
- Manuals
- Administration procedures
- Customer support



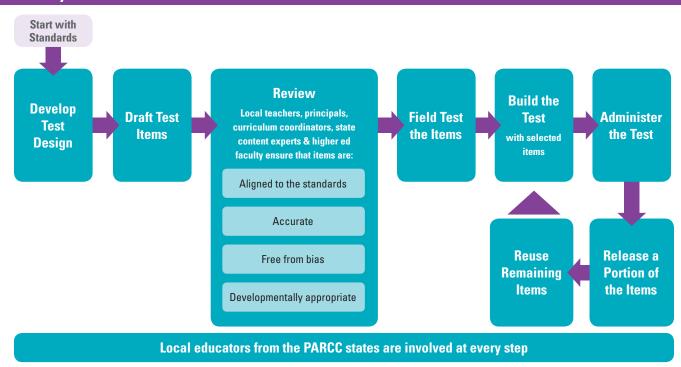
## **Test Items**

Before being field tested, PARCC test items were reviewed by multiple committees of educators from elementary, middle, and high school, as well as by faculty from colleges and universities representing all the PARCC states. These committees checked every item to ensure:

- Alignment to standards: Does the item measure what it is intended to measure?
- Content correctness: Is the item free of errors?
- Accessibility, fairness, and sensitivity: Might the item advantage or disadvantage any particular group of students? Does it appropriately consider the cultural backgrounds of students in the PARCC states?
- Developmental appropriateness: Is the language and content right for students of that age?

Every item appearing on the spring 2014 field test was reviewed by at least 30 people, many of them educators from the PARCC states, before being considered eligible to be placed in front of students.

One key purpose of the spring 2014 field test was to "test the test questions" to ensure that all items that appear in the 2014–15 assessments do a good job of measuring content, are clear, and are fair to all students. Although every item goes through multiple reviews prior to being field tested, the final determination regarding the quality of PARCC items is made only after they have been included in a test taken by students.



#### Life Cycle of a Test Item

Across all grade levels and courses, the PARCC consortium field tested more than 11,000 items — approximately 6,600 mathematics items and 4,600 ELA/L items, embedded in more than 400 English language arts/literacy (ELA/L) tasks and text sets.

On average, more than 1,100 students responded to each item during the field test. These responses were scored and generated item-level statistics such as difficulty, percentage of students who answered correctly, and whether the item seemed to advantage or disadvantage any particular subgroup of students. During a week-long review meeting, 80 educators from all of the PARCC states received training on how to interpret the item-level statistics, then reviewed the statistics for each field-tested item to determine whether it should be considered for use in the 2014–15 administration.

Most items were approved through this process. Others took two paths:

- Revision and further field testing. Some items needed further modifications to their content or format to be usable in the 2014–15 administration or future administrations. These revised items once again go through the PARCC item review committees, are field tested, and go through data review before being included in a PARCC assessment.
- 2. Elimination. The PARCC educators reviewing the field test data may determine that a small number of items are not candidates for revision and remove them from the item development process.

### **KEY FINDINGS**

The vast majority of items were approved through this rigorous review process. Approximately 89 percent of mathematics items and 78 percent of ELA/L text sets were approved. This cycle of field testing and data review is standard for all assessment systems, and the approval rates are typical for test items.

These items and text sets will be added to the PARCC item bank, which is the pool of items eligible to be used in the PARCC assessments.

#### MATHEMATICS

The mathematics performance-based assessment (PBA) has tasks that assess whether students can apply math in real-world situations and reason about math concepts. Some of the tasks ask students to explain how they solved a problem or show their work. Other tasks on the PBA assess conceptual understanding, skills, and applications using multiple-choice and technology-enhanced items.

The mathematics end-of-year (EOY) assessment consists only of tasks that assess a balance of conceptual understanding, brief applications, and skills and procedures. The EOY assessment tasks are all multiple-choice and technologyenhanced items and can be scored using technology.

#### ENGLISH LANGUAGE ARTS/ LITERACY

The ELA/L PBA consists of three tasks: literary analysis, research simulation, and narrative writing. For each task, students are asked to read or view one or more texts, answer several short comprehension and vocabulary questions, and write an essay that requires them to draw evidence from the text(s). The PARCC assessments use both printed and multimedia texts.

The ELA/L EOY assessment consists of two to four literary and informational texts — including social science/ historical, scientific, and technical texts at grades 6–11. Each text has five to six short comprehension and vocabulary questions associated with it. A text and its associated questions are called a "text set."

## **Student Experience**

Based on the student survey results from the spring 2014 PARCC field test and observations by test administrators, students found the assessments more engaging than previous tests and had a generally positive experience with the field test. They liked the computer-based platform and found it easy to use. They also did not have difficulty keyboarding, a concern that had been raised by some educators and parents, especially for students at lower grade levels. Students indicated that they were generally able to understand the directions. Most students finished within the time allotted. Many found the test content familiar, but more challenging than their schoolwork, especially in mathematics.

The PARCC consortium provided a student tutorial and practice tests to help familiarize students with the computer-based testing tools, the process for using the navigation within the computer-based test (CBT) delivery platform, and the process of responding to different types of items on the computer.

- 55 percent of test coordinators reported that the student tutorial helped students become familiar with the computer delivery platform and tools.
- 77 percent of test administrators reported that students in their CBT sessions practiced with the PARCC sample items before the field test.

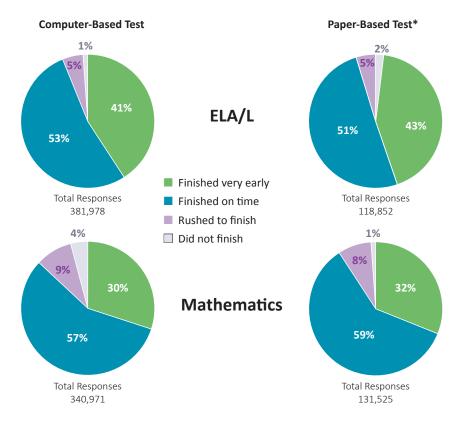
## **KEY FINDINGS**

The next several pages present results from the surveys students took after completing the PARCC field test. Most survey questions were intended for all students — those taking the CBT or PBT. Some questions were intended only for students who took the CBT, and the survey results indicate where there is a distinction between the CBT and PBT.



#### THE MAJORITY OF STUDENTS FINISHED WITHIN THE ALLOTTED TIME.

The overwhelming majority of students reported that they finished within the allotted time. One of the goals of the PARCC consortium's research was determining whether the time allowed for each test was sufficient for students to show what they know and can do. Using the results of this research, the PARCC states made some adjustments to the scheduled times for the 2014–15 administration, reducing overall testing time. Details may be found at www.parcconline.org/update-session-times.

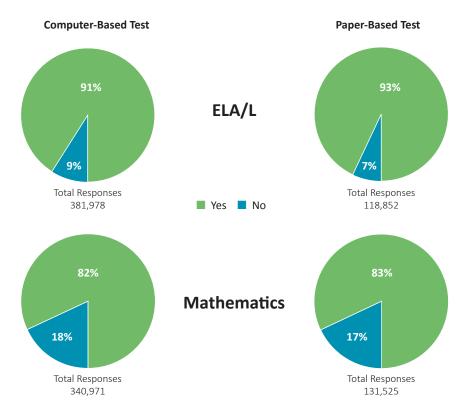


#### Did you have enough time to finish the test?

\*Note that percentages may not add up to 100 due to rounding.

#### THE MAJORITY OF STUDENTS UNDERSTOOD THE TEST DIRECTIONS.

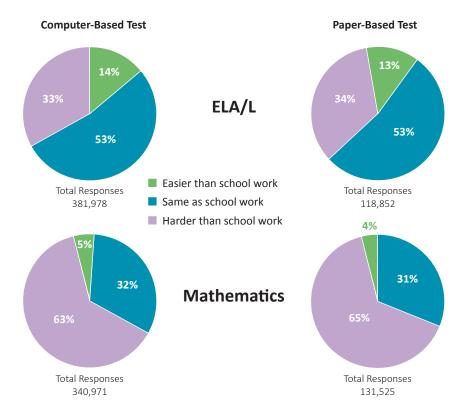
Because computer-based testing is new to many students, it was important to research whether students were able to understand the directions. For both the paper-based and computer-based versions, the majority of students reported that they understood the test directions that were read to them. For the 2014–15 administration, test scripts, which are the directions read aloud by the test administrators, are being updated with more age-appropriate language to ensure students' understanding of test directions.



#### Did you understand all of the directions read by the person who gave the test?

## STUDENTS FOUND THE MATHEMATICS EXPECTATIONS MORE CHALLENGING THAN THE ELA/L TEST.

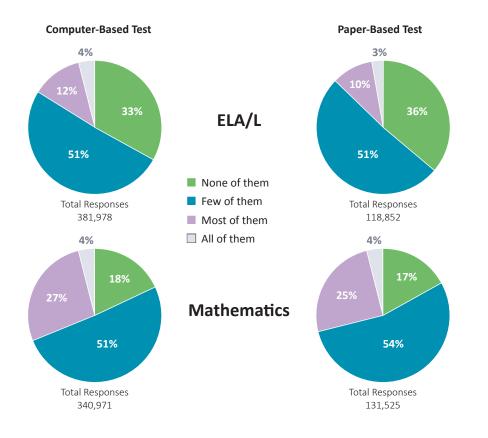
One goal of the PARCC assessments is to mirror classroom instruction that is aligned to the Common Core State Standards. The survey asked students to reflect on the PARCC assessments content and how it compares to what they see in their daily instruction. Overall, students felt that the content of the ELA/L assessments was similar to their schoolwork, while the mathematics assessments were more challenging than their schoolwork. This was true for both the CBT and PBT.



#### How difficult was the test?

#### How many questions asked you about things you have not learned in school this year?

Students responded that overall, they had been exposed to most of the PARCC assessments content in their classroom instruction. They reported less familiarity with content on the mathematics assessments than on the ELA/L assessments.

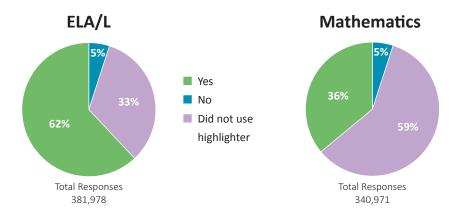


#### THE MAJORITY OF STUDENTS FOUND THE TOOLS EASY TO USE.

The PARCC CBT delivery system includes several built-in tools that students may use to input their answers or to help organize their work before answering. Overall, students responded that these tools were easy to use and that moving between items and passages was not challenging.

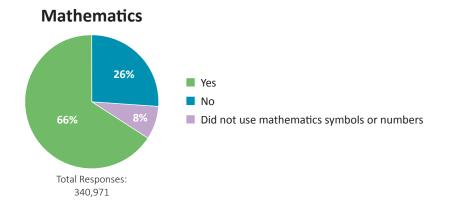
#### Was it easy to use the highlighter tool?

Students used this tool to highlight key details in test questions or passages to help them respond to test questions.



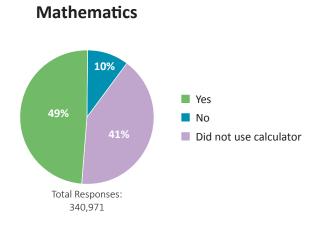
#### Was it easy to enter math symbols and numbers for your answers?

For the mathematics assessments, students used an "equation editor" to input answers to some of the test questions. While many students responded that it was easy to input their answers, updates to this tool to improve usability are being made for the 2014–15 administration.



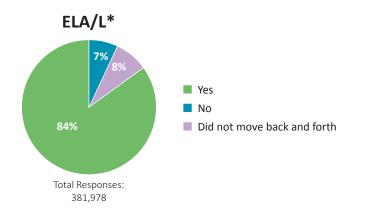
#### Was it easy to use the calculator?

The mathematics CBTs for grade 6 through high school include a built-in grade-appropriate calculator. Students taking the grades 3–5 assessments do not have access to a calculator.



#### Was it easy to move back and forth between passages or stories?

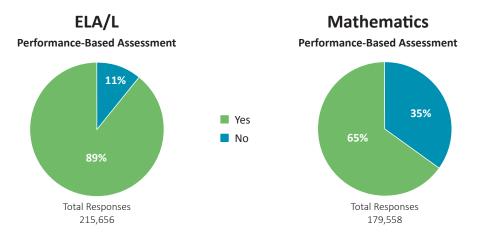
Many of the tasks on PARCC ELA/L assessments require students to read multiple passages and draw evidence from the texts in their responses. Students overwhelmingly responded that they found it easy to navigate between the passages on the computer-based delivery platform.



\*Note that percentages may not add up to 100 due to rounding.

#### Was it easy to type your answers?

Students who participated in the field test overwhelmingly indicated that it was easy to type the ELA/L answers, and approximately two-thirds said that they were comfortable typing their answers in mathematics.



### PLANNED IMPROVEMENTS

The PARCC states are updating and expanding the resources available to help students become familiar with what they can expect when taking PARCC assessments. Separate tutorials for each grade band (elementary, middle, and high school) are being created to ensure that the tutorials are grade appropriate. Additional student tutorials will cover a wider range of tools and item types.

The planned release dates of the student tutorials for the PBT and CBT are:

- High school tutorials: November 2014 (available now at parcc.pearson.com/tutorial)
- Grades 3–8 tutorials: January 2014 (will be posted at the same location)

Online practice tests for the mathematics EOY assessment and the ELA/L PBA are available online now at parcc.pearson.com.

Online and paper-based practice tests for the mathematics PBA and the ELA/L EOY assessment are in progress.

## **Technology Preparedness**

The computer-based PARCC assessments are delivered on Pearson's TestNav8 platform, which is the same system used by some state assessment programs. TestNav8 is supported on a wide variety of devices, including desktop and laptop computers, notebooks, and tablets.

Test administrators and coordinators and technology coordinators were asked about their experiences with TestNav8, including logging students into the system and carrying out other administrative functions.

The PARCC consortium made several tools and activities available to districts and schools to help them prepare for the field test and test their local technology before the field test. These included:

- The infrastructure trial, which gave local school districts, schools, and students the opportunity to prepare for the computer-based PARCC field test by simulating test-day network use;
- The SystemCheck tool, which allowed users to validate that their testing workstations met the minimum requirements needed to run TestNav8 for the field test and to evaluate bandwidth capacity for internet and proctor-caching connections;
- The Technology Readiness Tool (TRT), which evaluated and determined necessary technology and infrastructure upgrades for the new online assessments; and
- Proctor caching, which pulled and stored test content from Pearson to a local computer and distributed this "cached" content to students in order to increase speed of delivery and reduce bandwidth usage. (See next page.)

### **KEY FINDINGS**

Based on survey feedback, the majority of test administrators and test coordinators took advantage of the technology preparedness tools and activities.

- 69 percent of test coordinators and test administrators conducted an infrastructure trial.
- 62 percent of test coordinators and test administrators used data from the TRT to evaluate whether the number of devices and bandwidth were sufficient to administer the test.
- 60 percent of test coordinators and test administrators used proctor caching.

Even with the high use of the available technology preparedness tools, some schools indicated that they experienced local technology issues, for example devices that stopped working, devices that worked slowly, or cases where internet connection was lost during administration.

## PLANNED IMPROVEMENTS

Although local school districts are responsible for their own technology (devices, internet connectivity, etc.), the PARCC consortium has worked since the field test to provide districts and schools with additional supports to improve the local technology experience.

- The PARCC states made another infrastructure trial available to schools in October, providing them with ample time to conduct this test-day network use simulation prior to the 2014–15 administration. Schools and districts that had conducted an infrastructure trial had more seamless experiences during the field test.
- The PARCC states are enhancing the guidance and documentation around the SystemCheck tool to ensure wider use and understanding. SystemCheck allows customers to validate that their testing workstations meet the minimum requirements needed to run TestNav8 for the assessments and evaluate bandwidth capacity for internet and proctor-caching connections.
- The PARCC states are updating the training modules available to guide users in conducting an infrastructure trial and proctor caching to ensure that they are more comprehensive and provide clearer step-by-step instructions.
- The PARCC states will provide a new technology preparedness training module to help organizations understand, manage, and make decisions in preparing school technology to be used for online testing.
- The PARCC states are developing clear, consistent, and comprehensive communication to be sent to states and districts regarding technology preparedness tools, resources, timelines, and support.

#### **PROCTOR CACHING**

In order to address bandwidth challenges in some school districts, the PARCC states provided a low-bandwidth option for computer-based testing that loads tests faster for students and minimizes the impact of computer-based testing on district bandwidth use. Proctor caching is a method by which test content is stored to a local computer and then distributed to students taking the test. Districts had the flexibility to determine where to implement proctor caching in their network environment. Based on local network considerations, districts could implement proctor-caching machines at the district, school, or classroom level. By implementing proctorcaching software, districts and schools were able to download one copy of the test to a specific computer; then, during testing, content was sent directly from this caching computer to the students' test-taking computers.

#### **KEY FINDINGS**

Approximately 60 percent of schools and districts took advantage of proctor caching, according to the technology coordinator survey results. In general, technology coordinators found proctor-caching guides and tutorials to be helpful in setup and implementation. Overall, they found the hardware requirements easy to meet and were pleased that the software could run on many desktop computers. One IT manager in Massachusetts even wrote a blog post documenting the ease of his experience with the proctor-caching setup (bit.ly/PARCCguestblog).



#### **PLANNED IMPROVEMENTS**

Updated proctor-caching software is now available at parcc-test.pearson.com/technology-setup, with an updated interface to make it more user friendly. This update will not be required for schools that already set up proctor caching for the field test, but it is strongly recommended, as it will improve performance. Enhancements include a simplified user interface, resolution for Internet Explorer 11 connectivity issues, and improved reporting to help verify that the most up-to-date content is available for testing.

The PARCC states are also reviewing the proctor-caching documentation and training materials to help users understand how to monitor and manage proctor caching. In addition, the PARCC states will continue to encourage the use of infrastructure trials to help schools and districts better understand the proctor-caching process and prepare for test day.

## **Training Materials**

Training support was provided to test and technology coordinators and other staff in states, local districts, and schools in two formats: online training modules and student tutorials. Test coordinators and administrators said that the training was helpful in creating a smoother experience during the field test.

In preparation for field testing, the PARCC consortium worked with Pearson to provide a variety of on- and off-site trainings for PBA and EOY assessment participants. These trainings included:

- 36 regional training workshops;
- 54 site visits;
- 7 question-and-answer workshops;
- 1 student tutorial and several practice tests; and
- 10 online training modules.

The following online training modules were offered in advance of the PARCC field test:

SystemCheck tool. This module contains information about using the SystemCheck tool to review device and network readiness. It provides information about the content and usage of the two available tools, as well as examples of error messages and of successful completion of a device check and a network capacity check.

**Student Data Upload Overview.**<sup>1</sup> This module provides step-by-step instructions for states, districts, and schools to load students into PearsonAccess using the PARCC Student Data Upload file layout.

Setting Up an Infrastructure Trial/Dress Rehearsal. This module provides a description of an infrastructure trial and information on how to prepare for one using the PARCC Training Center.

Technical Setup. This module describes each of the technology components used in computer-based testing. Configuration and hardware requirements are included, as are common best practices for successfully testing online. Users are provided with information on accessing separate training modules for SystemCheck, emerging technologies, and setting up an infrastructure trial to avoid redundancy in training.

**Test Administration for Computer-Based Testing.** This module covers the tasks and activities for test administration staff using PearsonAccess. Information is provided on managing user accounts and student data, as well as test management. Viewers also receive information for creating and managing online sessions during field test administration.

**Test Administration for Paper-Based Testing.** This module covers the tasks and activities for test administration staff using PearsonAccess. Information is provided on managing user accounts and student data, as well as test management.

**Emerging Technologies and Security with Computer-Based Testing.** This module addresses special considerations with iPads and virtualization solutions. New technologies present additional security challenges, which are addressed along with other security concerns specific to computer-based testing. Those include active test monitoring, securing authorization tickets, and computer lab physical configuration.

<sup>1</sup> PearsonAccess Next refers to the Student Data Upload (SDU) as Student Registration Import, which is the term that will be used going forward.

Accessibility Features and Accommodations with Computer-Based Testing. This module is designed to provide information about available accessibility features and accommodations for computer-based testing. It references the Draft Accommodations manual and Full Specifications document available on the PARCC website. This module also covers the steps to assign an accommodated form to a student in the Create Sessions process within PearsonAccess.

**Training for Test Coordinators.** This module provides an overview of information covered in the test coordinator manuals, such as roles and responsibilities of test coordinators and tasks to complete before, during, and after administration of the PARCC assessments.

**Training for Test Administrators.** This module provides an overview of information covered in the test administrator manuals, such as the roles and responsibilities of test administrators and tasks to complete before, during, and after administration of the PARCC assessments.

### **KEY FINDINGS**

The majority of test administrators and test coordinators (on average, 59 percent) indicated that the online training modules were useful in preparing and administering the assessments.

According to test administrators, the most viewed PARCC training modules were:

- Test Administration for Computer-Based Testing
- Accessibility Features and Accommodations with Computer-Based Testing
- Setting Up an Infrastructure Trial/Dress Rehearsal

According to test coordinators, the most viewed PARCC training modules were:

- Training for Test Coordinators
- Setting Up an Infrastructure Trial/Dress Rehearsal
- Training for Test Administrators

### IMPROVEMENTS

The PARCC states have made several improvements to available modules based on the field test feedback, including:

- Student Registration Import (September 19, 2014)
- PearsonAccess Next (October 9, 2014)
- Paper-Based Testing for Test Coordinators (October 10, 2014)
- Paper-Based Testing for Test Administrations (October 13, 2014)
- Introductions to Training (October 20, 2014)
- Accessibility Features and Accommodations (October 21, 2014)

Modules now make clearer which tasks pertain to test administrators and which to test coordinators.

## Manuals

In preparation for field testing, the PARCC states provided test administration manuals. The manuals used during the field test were:

- Computer-Based Testing Field Test: Test Administrator Manual
- Paper-Based Testing Field Test: Test Administrator Manual
- Computer-Based Testing Field Test: Test Coordinator Manual
- Paper-Based Testing Field Test: Test Coordinator Manual

### **KEY FINDINGS**

Survey questions helped capture school and district test coordinators' overall opinions on the quality of the test administration manuals, including whether they were user friendly and contained sufficient information for test administration.

|   | RESPONSE*                |         |                                |
|---|--------------------------|---------|--------------------------------|
| SURVEY STATEMENT  | Strongly Agree/<br>Agree | Neutral | Strongly Disagree/<br>Disagree |
| The <b>test administration manuals</b> were user friendly/<br>information was easy to find. | 42%                      | 19%     | 29%                            |
| Language [in the test administration manuals] was clear and concise.                        | 42%                      | 20%     | 27%                            |
| Information [in the test administration manuals] was relevant and useful.                   | 50%                      | 23%     | 18%                            |
| Information [in the test administration manuals] was sufficiently comprehensive.            | 46%                      | 21%     | 23%                            |

\*Note that percentages do not add up to 100 because the remaining respondents selected "Not Applicable."

## PLANNED IMPROVEMENTS

Many of those who responded to the test administrator and test coordinator surveys called for improvements to the test administration manuals and procedures.

#### SIMPLIFYING MANUALS AND MAKING THEM GRADE APPROPRIATE

The PARCC states:

- Have streamlined and simplified the manuals, including administration scripts;
- Are working with grade-level experts to ensure that administration scripts are grade appropriate, as the manuals will be split into grade bands;
- Are updating manuals to include a simple and direct checklist of tasks to complete before, during, and after testing; and
- Are updating manuals to include more explicit directions, including graphics and icons to increase user understanding.

#### **CLARIFYING MAKE-UP TESTING POLICIES**

The PARCC states:

- Are working to simplify and clarify make-up testing policies, including allowing more flexibility for scheduling purposes; and
- Are carefully reviewing and updating manuals to ensure that procedures and directions are simple and clear.

#### **IMPROVING CALCULATORS**

- The PARCC states are working on enhancements in the calculator sections to make it easier for test administrators to monitor calculator use, including:
  - For computer-based testing, changes in the interface will make it easier to monitor whether a student is in a calculator section.
  - > For paper-based testing, a calculator icon will be added to the pages in the calculator sections of the test booklet.

#### **ADJUSTING SUBMIT PROCESS**

The PARCC states will only make the "Submit" function available in the final section of the exam. Prior to that, only "Exit & Save" can be selected to leave the test.

## **Administration Procedures**

#### To administer the field test, participants used the following platforms.

- PearsonAccess, the single, consolidated online system for managing the PARCC assessments.
  - > PearsonAccess is role-based, meaning users will see only those data and perform only those tasks for which they have been authorized.
  - Based on a user's role in the system, he or she may do one or more of the following: manage student data for testing, manage staff accounts, and/or create CBT sessions.
- TestNav8, a secure, browser-based application used at student workstations to take CBTs.
  - TestNav8 runs in the cloud, delivering tests via a web browser on desktop and laptop computers and via a custom app on selected tablets.

## **KEY FINDINGS**

Survey questions helped capture school and district test coordinators' overall opinions on the quality of the test administration procedures, including whether they were user friendly and contained sufficient information for test administration.

|   | RESPONSE*                |         |                                |
|---|--------------------------|---------|--------------------------------|
| SURVEY STATEMENT  | Strongly Agree/<br>Agree | Neutral | Strongly Disagree/<br>Disagree |
| The <b>PearsonAccess portal</b> used by PARCC was easy to use.                                | 45%                      | 19%     | 20%                            |
| The <b>student registration process</b> was straightforward and easy to complete.             | 37%                      | 17%     | 16%                            |
| The task required for the <b>test setup process</b> was straightforward and easy to complete. | 39%                      | 19%     | 17%                            |
| TestNav8 worked well during test administration.  | 28%                      | 15%     | 40%                            |

\*Note that percentages do not add up to 100 because the remaining respondents selected "Not Applicable."

## PLANNED IMPROVEMENTS

The PARCC consortium's plan for responding to the feedback is outlined below.

#### **USER FRIENDLINESS**

- A revised version of PearsonAccess called PearsonAccess Next was launched this fall with an updated interface to make it more user friendly.
- To avoid confusion, the training site and the site where information is formally entered will have different color schemes. The training site will also be clearly labeled with a large header.
- With the launch of PearsonAccess Next, system processes will be updated to be task-based, ensuring that they are more streamlined and less time consuming.
- By design, PearsonAccess Next times out after 15 minutes for security purposes. The consortium will communicate this requirement to users.

#### **STUDENT REGISTRATION FILE AND IMPORT**

- To allow users to make changes to existing student records, the PARCC consortium provided the Student Registration File layout, including field definitions, at the end of August 2014.
- The Student Registration window was open from early September through early October for the fall block administration.
- For the 2014–15 administration, users will have the option to auto-create test sessions in PearsonAccess Next for all students in a classroom at once based on class name.

**TEST MANAGEMENT IMPROVEMENTS** will clarify the process for setting up test sessions, make it easier to manage absent students, and move students to different test sessions within PearsonAccess Next.

- PearsonAccess Next will allow for the automatic creation of test sessions based on the information in the Student Registration File.
- For spring 2015 and beyond, only the number of seal codes needed for a given test (per grade level) will be made available to test administrators.
- Manuals and guides were updated to include clear instructions on how to create and manage sessions along with managing students (including absent students) beginning with the fall block.
- PearsonAccess Next configuration will allow a student to be moved from read-aloud to non-read-aloud without having to set up a new test session.

**ONLINE TESTING IMPROVEMENTS** will address performance issues with some tools, problems loading the videos, and some students being locked out of sessions.

- The PARCC states will use an independent vendor to test the platform and identify performance issues needing improvement. The PARCC states will also conduct "load testing" and other tests to pinpoint performance issues and solutions.
- As part of the January release of TestNav8, the equation editor will be updated with a simplified user interface, improved usability of mathematics functions, and improved tablet usability.
- As of the October release of TestNav8, the "Submit" button is only available in the final section of the exam.
- The PARCC states will improve information dissemination on minimum technology specifications and how to set up devices.

## **Customer Support**

Leading up to and during the field test administration, a call center provided technical assistance in many areas, including:

- Preparing for proctor caching;
- Registering students;
- Student login troubleshooting;
- Firewall settings and other local technology issues that interfered with signing students on; and
- Resets when students inadvertently submitted their answers before completing a test section.

### **KEY FINDINGS**

The volume of calls to the support center in the early days of the field test exceeded expected levels and resulted in slow response times and dropped calls. More than 1,300 people called or emailed the call center each of the first two days of the field test. It took more than a minute the first day and close to a minute the second day for calls to be answered. More than 80 people abandoned their calls over the first two days.

The PARCC consortium worked with Pearson to quickly and significantly increase the number of support specialists and to improve their training. Within days, with more staff at the call center and better training, calls were answered, on average, within three seconds, and on most days no callers abandoned their calls.

When asked about their experience with the Pearson-run PARCC support center during the field test, test coordinator survey respondents indicated that their service requests were answered promptly 75 percent of the time, their questions were answered within one communication 65 percent of the time, and their questions were answered accurately 51 percent of the time.

## PLANNED IMPROVEMENTS

Support for field test participants was an important success factor and will continue to play an integral role in the PARCC fall block and spring administrations. Below is a summary of how the PARCC consortium plans to respond to the feedback regarding customer service.

- Call center agents will be trained on basic customer service; testing tools such as TestNav8, PearsonAccess Next, SystemCheck, and training management site; and tablet training.
- The PARCC consortium created a Quick Start Checklist based on feedback from test coordinators indicating the need for a cohesive step-by-step guide. This gives test coordinators and technology coordinators an overview of the entire process, with references and links to the various tools and resources available to them.

#### SOCIAL MEDIA PLAYED A KEY ROLE

Social media played an important role during the field test. The PARCC consortium had more than 14,000 Twitter followers during the field test (and more than 17,000 at the issuance of this report). Social media allowed the PARCC consortium to see how some teachers share resources, how tech coordinators share helpful tips, and how test administrators seek advice from each other. During field testing, PARCC:

- Posted live updates to the PARCC online news page;
- Tweeted important information each day;
- Asked participants to share their field test experience using the hashtags #PARCCfieldtest and #askPARCC; and
- Asked test coordinators and administrators to send direct messages to the PARCC consortium via Twitter with questions.

Unlike surveys, social media provided the PARCC consortium with lessons learned in real time. The PARCC consortium was able to view participant feedback instantly through live posts and develop a plan of action to address that feedback. Social media will be monitored in future administrations of the assessments as well.

#### Sample Tweets from the Field

@Susan\_Kahn thank you! Can honestly say my son's experience with #PARCC reaffirmed my belief in this assessment hundred fold #coreadvocates

### **#PARCCfieldtest #askPARCC**

Watching the demo of the #PARCC test nave video questions!! Very cool #edchat #parcc #parccfieldtest Seems that turning off anti-virus eliminates all of the problems with video load we were experiencing. @PARCCPlace

> PARCC Field Test: PBA Field Test complete. With the exception of minor blip day1, all went very well. Planning & collaboration = success!

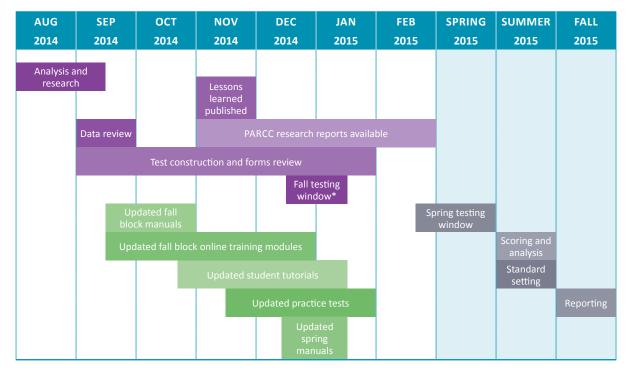
#PARCC field resting went well today. Day 2 for 3rd graders. No tech issues. Tech staff was awesome! Grt team. #edtechchat #satchat #njed

> What a pleasure to spend time with the 50 6th graders who took the PARCC Field Test the past few days. They enhanced my faith in the future.

Pearson and the PARCC consortium were able to take steps to improve customer service during the field test by monitoring social media and the live feedback received from field test participants. They provided real-time assistance by reaching out directly to schools that needed it.

## **Post-Field Test Timeline**

The timeline below details the major activities associated with the 2014–15 PARCC assessments.



\*High schools with block scheduling

Note: These are estimated timeframes and subject to change.

## Conclusion

As planned, the field test provided an opportunity to test the test items, evaluate the administration process, and conduct research. Because the field test administration was successful overall, the PARCC consortium has been able to focus on making important refinements and improvements.

Evidence gathered during the field test and from survey responses indicated that the test content hit the mark. Most students were able to follow instructions, use the keyboard and various test features (such as the online calculator), and complete the tests in less than the time allotted.

The online test system performed well. Where technology issues appeared, they were at the local level. The PARCC states are adding resources to help schools and districts, especially those that are not experienced in computer-based testing, prepare for the 2014–15 administration.

The PARCC states are making improvements to test administration manuals and some administrative features and processes. The states are making it easier for students to correctly exit test sessions and use the mathematics equation editor and clarifying when the online calculator can be used.

In addition, the PARCC states are preparing to release practice PBTs and additional online practice tests to provide more resources for teachers and students.

The field test experience showcased the power of states working together. It was through the contributions and expertise of teachers, principals, curriculum coordinators, superintendents, and others from multiple states that this undertaking was possible.

#### **STAY INFORMED**

If you have any questions, please contact PARCC at questions@parcconline.org.

To stay connected, sign up for PARCC updates at parcconline.org and follow PARCC on Facebook and Twitter.

## **PARCC Terms and Acronyms**

## TERMS

Field test: A test that evaluates the PARCC assessments by helping to ensure that they are valid, reliable, and fair.

**Infrastructure trial:** A trial that provides the opportunity for districts, schools, and students to prepare for the computer-based PARCC field test by simulating test-day network use.

**PearsonAccess:** The administrative website used by the district and by school coordinators, administrators, and technology coordinators.

PearsonAccess Next: The test-management system that replaced PearsonAccess in fall 2014.

**Proctor caching:** A process that pulls and stores test content from Pearson to a local computer. This "cached" content is distributed to TestNav8 clients in order to increase the speed of delivery and reduce bandwidth usage.

**Seal codes:** The electronic equivalents of the adhesive tabs that are used to seal sections of paper test booklets. There will be one set of seal codes assigned to each test session.

Section: A portion of a mathematics unit – calculator section and non-calculator section.

**Session:** A session includes all of the units for a subject and may be scheduled across one or more days. Sessions are scheduled by subject and the group of students testing that subject together (as set up in PearsonAccess Next for computer-based testing).

SystemCheck tool: A tool that allows customers to validate that their testing workstations meet the minimum requirements needed to run TestNav8 for the field test and evaluate bandwidth capacity for internet and proctor-caching connections.

Technology Readiness Tool (TRT): A tool that evaluates and determines needed technology and infrastructure upgrades for the new online assessments.

TestNav8: The secure, browser-based student application for accessing the computer-based assessments.

**Tutorial and practice tests:** Tools that provide the opportunity for districts, schools, and students to familiarize themselves with the design and functionality of online testing.

### ACRONYMS

- **CBT** computer-based test
- ELA/L English language arts/ literacy
- EOY end of year

PARCC - Partnership for the Assessment of Readiness for College and Careers

PBA – performance-based assessment

- PBT paper-based test
- TRT Technology Readiness Tool



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