

# PARCC

## Technology Ready

### Assessment Department

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## PARCC Online

The PARCC Assessment will be fully operational in SY 2014-15. Both the Performance-Based Assessment and the End of Year Assessment will be administered online. All students will be expected to participate in these online versions in grades 3-8. Students will be expected to participate in online versions of algebra and geometry, as well as English I, II and III in high school. However, if a student has an existing IEP requiring paper-pencil administration, that accommodation will be made available.

In past presentations, PARCC representatives have stated that in those very few instances in which some schools in a district are not Technology Ready, short-term exceptions will be made and a paper option will be available.

Please note that in more recent presentations PARCC representatives have not referenced this exception and stated that all schools need to be Technology Ready.

There are three factors associated with a school being Technology Ready for PARCC:

- hardware or computing devices,
- bandwidth needs, and
- ideal student to computer ratios.



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## What is Technology Ready?

A Technology Ready school has sufficient numbers of devices and adequate bandwidth to test all students in the 20 day window. Each school's status for the three factors is combined to create a Technology Ready Status or Gap for a school.

The calculation is an interaction of the number of devices that can be used for testing, the bandwidth available per student, the student-to-computer ratio and the number of days the school wishes to use for testing.

The Capacity Planning Tool helps determine the school's status and where the gaps might be in meeting devices needed, bandwidth, or testing days.

### Technology Factors:

- Hardware devices that meet the standards.
- Bandwidth per student.
- Student-to-Computer ratio.

## Hardware - Devices

When counting or considering computers for Technology Ready status, each computer must meet the standards listed here. These computers may be available in labs, in media centers, classrooms or on carts. The Minimum Standards devices will last through the 2014-15 testing year; devices meeting Recommended Standards will be usable through 2018-19.

All devices must have a keyboard and a mouse or touch screen capacity.

Any device with higher specification or a newer operating system will also be useable.

	Operating System	RAM	Screen	Resolution
Minimum Standards	Windows XP OS10	512 MB	9.5 inches	1024 x 768
Recommended Standards	Windows 8 Mac OS10.7 Android 4.0 ipad iOS6	1 GB 1GB 1GB 512 MB	9.5 inches	1024 x 768



## Student-to-Computer Ratio

PARCC does not provide a specific ratio of students to computer. PARCC recommends that "...devices for assessment should be only one factor in an overall strategy for educational technology..."

The capacity planning tool uses 3 different ratios of students-to-computers to show the number of testing days you will need.

The following ratios are presented:

- 2 students per device in all tested grades;
- 2 students per device in the largest grade to test;
- 1 student per device in all grades to test.

The Capacity Planning Tool helps you determine where the ratio of students-to-computers comes together with the available days to test (20 days).

## Bandwidth

*"Bandwidth requirements now set at 100 kbps will be finalized October 2013."*

PARCC requirements are stated in terms of a testing session per student. These requirements are not finalized but dependent on PARCC's development of assessment items and the technology platform to deliver them. PARCC anticipates the release of final bandwidth

requirements by October 2013. Consider these estimates to be conservative or the most demanding for schools.

The maximum bandwidth demand per student per test session has been set at 100 kbps for online administration.

This means that students will maintain an active

connection to the internet throughout the test. If a caching approach is used for the administration of the tests then the per-student per-test session bandwidth demand will be reduced to 30 kbps for caching.



## Bandwidth - Continued

We have consulted with the Technology Department regarding these standards. Technology staff is working closely with our internet service provider to help ensure each school is able to meet the demands of PARCC testing for bandwidth.

Technology staff will also work with each school to determine appropriate server configuration so that students can access the 100 kbps.

In the meantime, you can use the 100 kbps standard as you work toward determining your Technology Readiness.

*Technology staff is working with our internet service provider to ensure all schools will meet the PARCC bandwidth standards.*

## Capacity Planning Tool – What Is It?

The Capacity Planning Tool (CPT) uses enrollment, number of devices, test days and bandwidth in varying combinations to create a testing scenario and gap analyses.

For example, if you enter enrollment, the number of acceptable devices in your school and the available bandwidth, the tool will calculate the number of days required for testing. This is known as the Device Capacity Model.

If you enter enrollment and the number of days you want to test, the tool calculates the number of acceptable devices you will need. This is known as the Assessment Administration Model.

Both models can be helpful as you plan for the PARCC implementation and as you plan to use your technology refresh funds.



## How Does the CPT Work?

The CPT uses four assumptions as it develops estimates. It is important that you remember these as you use the tool to create various situations for your school.

- The testing window will be 20 days for the PBA and EOY, each.
- Each student will test a total of 9 sessions (5 for PBA; 4 for EOY).
- The tool estimates a student's sessions occur over a 5-day period for each component.
- Each school has 2 students to every acceptable device.
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Using this information, the CPT estimates the number of devices or the days for testing. You can change the information you enter to gather estimates for devices or days of testing needed at your school.





*Find the  
Capacity Planning Tool on the landing page of AIMS.*

## Why Do I Need to Use the Capacity Planning Tool?

Once you enter the statistics for your school you can adjust the figures to create your own scenarios such as:

- How many devices do I need if I want to test every student in 10 days?
- How many testing days do I need if I have 180 devices and 460 students?

The best starting place would be to use the Assessment Administration Model. This model uses the number of students to be tested, the days of testing (20). You would assume 100 kbps per student bandwidth. The model provides you the number of devices you will need.

The Capacity Planning Tool is available through a link on your AIMS landing page. If you have difficulties accessing this tool, contact your RDA Accountability person and they will assist you.

## Testing Your Technology Readiness

At this time, we do not have a way to test the 'load' on your computers or the servers at the school. Technology staff does know the amount of bandwidth at each school but will continue to work school-by-school to test how each school's servers access that bandwidth.

The New Mexico Public Education Department (PED) is planning to administer next year's (2014) SBA online. There will be paper/pencil options so that schools may have some students test online and others use paper/pencil until the full capacity of computers and bandwidth are known.

You may wish to share this newsletter with your technology coordinator or technology teacher to see if there are some early processes that might help you prepare for the upcoming online testing.

The Assessment Department continues to work closely with PED staff to determine alternatives if there are difficulties in fully implementing online testing in our schools.

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