Technology Guidelines for the New Colorado Summative Assessment of Science and Social Studies

Current technology requirements for the Colorado Science and Social Studies online Summative Assessments that will be operational in 2014 are the same as the current version of the PARCC technology guidelines. The guidelines for both the Colorado Science and Social Studies and PARCC assessments can be found in the Technology Guidelines for PARCC Assessments: Version 2.1. Here are some important highlights:

Chromebooks

Chromebooks may be used for the Colorado Science and Social Studies and PARCC assessments as long as they meet the minimum device specifications for laptops and Netbooks identified by Technology Guidelines for PARCC Assessments: Version 2.1.

iPad

iPads may be used for the Colorado Science and Social Studies and PARCC assessments if they meet the minimum device specifications for tablets identified in Technology Guidelines for PARCC Assessments: Version 2.1, including the restrictions identified below.

iPad Device Specifications

iPad Version	Operating System	RAM	Keyboard	Mouse
iPad 2 or greater	iOS 6	512 MB RAM or greater	Must have external keyboard	Must have touch screen interface or mouse

- Due to the onscreen space occupied by a tablet's virtual keyboard, the New Colorado Summative Assessment will require external keyboards for test takers using tablets so as not to limit or obscure the view of test item content and related functionalities when text input is required.
- External keyboards must allow students to enter letters, numbers, symbols, 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.
- Tablet touchscreen interfaces can be used for student interactions with the assessments other than text input, including to select/deselect, drag, and highlight text, objects, and areas.
- Comparability research studies are being conducted and are intended to yield data on students' use of virtual versus external keyboards, and the use of a touch screen versus the use of a mouse. CDE will refine this guidance as needed based on these results.

Security Requirements

Districts must balance the security and configuration implications of granting students administrative rights on their computers. Granting students administrative or elevated rights to install software or make configuration changes may provide greater challenges in preparation for online testing. Districts can better control the configuration of student computers and ensure preparedness for online testing when students are not granted administrative rights to their computers, or when those elevated rights are tightly controlled. When the administration rights are tightly controlled, it

can prevent the student from downloading software or changing a computer's settings within the testing window which could interfere with test engine functioning.

Eligible devices of any type (desktop; laptop; netbook; tablet; thin client) or operating systems (Windows; Mac; Linux; iOS; Android, Chrome) must have the administrative tools and capabilities to "lock down" the device, including temporarily disabling features, functionalities, and applications that could present a security risk during test administration. This "lock-down" mode should not prevent Pearson's TestNav from entering the computer when in lock-down mode. 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
- printing

The operating systems listed here are approved for Colorado Science and Social Studies online Summative Assessments meet the security requirements but provide different mechanisms for managing user security settings at the individual device and/or enterprise levels. To ensure test security is maintained, school technology administrators should be familiar with the particular requirements of the systems they will be using for the Colorado Science and Social Studies online Summative Assessments.

Headphone/Earphone and Microphone Requirements

Keep in mind that headphones/earphones are required for all students for all PARCC assessments in 2015. Some student accommodations may also require headphones/ earphones (e.g., text to speech). Microphones may be required for all students taking the Speaking and Listening Assessment. Some student accommodations may also require microphones (e.g., speech-to-text; voice controls) for other parts of the PARCC assessments.

The Technology Guidelines for PARCC Assessments: Version 2.1 can be found on the PARCC website under the PARCC Assessment tab in the technology section at the following link:
http://www.parcconline.org/sites/parcc/files/PARCCTechnologyGuidelines2dot1_Feb2013Update.pdf