Computer-Based Testing Readiness Review

Sun Associates

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LOWER HUDSON REGIONAL INFORMATION CENTER
Southern Westchester BOCES · Putnam Northern Westchester BOCES · Rockland BOCES

Contents

11/18/13

I. Introduction

Purpose of the CBT Readiness Review

The [Common Core State Standards Initiative](#) promises to bring sweeping changes to how students learn and teachers teach. The curriculum-based aspects of the Common Core relate to providing students with opportunities to meet world-class standards for developing thinking, learning, and creativity skills. For teachers, the work to implement and create the learning environments necessary for meeting the standards brings to the fore issues of moving curriculum, instruction, and assessment fully into the 21st century. Perhaps nowhere is this movement more obvious than in the fact that the new Common Core assessments scheduled to replace existing state-standardized tests starting in [SY2014](#) will fully utilize computer-based testing (CBT). CBT will allow states, districts, teachers, parents, and of course students to quickly and efficiently access assessment data and to thereby quickly fine-tune learning in a way that is not possible with traditional paper and pencil tests.

Just as the Common Core challenges teachers to develop and deploy new instructional practices to meet new standards, the CBT component of the Common Core challenges districts to deploy a sufficient level of technology infrastructure to support the new assessments. In fact, this infrastructure is largely what most districts have been aiming for in terms of student access to instructional technology for day-to-day use. Likewise, the intense network bandwidth and nearly one-to-one student to device ratios required for Common Core testing are key components of a 21st century learning environment. Measuring and assessing your infrastructure's ability to support CBT is also a productive activity for addressing broader teaching and learning initiatives.

In New York, the new computer-based Common Core assessments are commonly referred to as [PARCC](#) assessments. The acronym reflects NY's a membership in the Partnership for Assessment of Readiness for the Common Core, the 18 state consortium working to implement the Common Core assessments of college and career readiness. To assist in the implementation process, PARCC has published a set of guidelines detailing the technology requirements related to its assessments. This CBT readiness review process supplements the PARCC materials so as to help districts understand the requirements and then to conduct the necessary tests to determine the full extent of district readiness. The review process provides resources for districts to aggregate and describe what they need to reach readiness. This description is useful in working with the funding agents and vendors that will ultimately move districts to acquire a better understanding of what is required to support CBT.

Readiness Review Components

Readiness Checklist – Districts should complete this checklist that prepares the district for engaging in the CBT Readiness process.

Readiness Responsibility Worksheet – This simple worksheet helps districts assign responsibility for various aspects of readiness preparation and to create a timeline for the readiness review process.

PARCC Technology Guidelines – PARCC has prepared a set of guidelines that describe the hardware, software, and network bandwidth necessary to administer the assessments to the level of the student desktop. These guidelines form the basic infrastructure readiness indicators for the Readiness Review process.

PARCC Capacity Planning Tool – PARCC has created an interactive tool that takes district data on guideline-compliant devices, bandwidth, and testing conditions (days, numbers of students, etc.) and then compares this data to the PARCC Guidelines. The result of this comparison is a quantitative report on device and bandwidth adequacy.

CBT Other Factors Guide – We have created a set of guidelines for describing and addressing the issues related to staffing, scheduling, etc. necessary for administering the assessments.

District Readiness Gap Analysis Report – This report template aggregates and summarizes the data that flows from the Capacity Planning Tool and Human Factors Guide. Completing this template-driven report provides districts with a way to organize and present their data findings (gaps) in a "proposal" that goes to Boards/district administrators and explains what a district needs to do to reach full readiness.

How the CBT Readiness Review Process Works

The CBT Readiness Review Process is a combination of guidelines, interactive tools, and procedural suggestions that provides districts with a guided approach to discovering their degree of readiness and then developing solutions for reaching full readiness to implement the PARCC assessments.


Technical assistance is a key component of the review process. Depending on individual district preference, your regional information center (RIC) or BOCES offers the following technical assistance options:

·   Assistance to a district in gathering infrastructure, testing, and human factors data and inputting that data into the various components of the readiness review process. This assistance is scheduled through communication with your RIC/BOCES contact. Typically, districts that have gathered their internal data will need less than one day of technical assistance time to complete the tools.

·   Assistance to a district in completing the [Readiness Gap Analysis Report](). Once a district has completed the Capacity Planning and Other Factors tools, the results from these instruments can be migrated into a report. The review process has provided a template for this report. Your RIC/BOCES offers assistance to districts in completing the report template and in customizing the report for presentation to district funding authorities (in the event that the district needs to purchase additional resources to reach a state of readiness). This technical assistance is scheduled through communication with your district's RIC/BOCES contact person for technology services.

- Assistance to a district in investigating and purchasing additional resources. This assistance is entirely optional, but it may be helpful to have assistance in exploring how RIC or BOCES services (including various CO-SERs) can help your district address gaps in readiness.

Districts are urged to contact their RIC/BOCES for information on how to access technical assistance specific to CBT Readiness. In some cases, districts might be working with other technical service providers, Internet service providers, or technology vendors. These outside resources are also important parties in your district's CBT Readiness process and should therefore be contacted and brought to the table as you work through the readiness process.

The following graphic illustrates the process for engaging with the CBT Readiness Process.
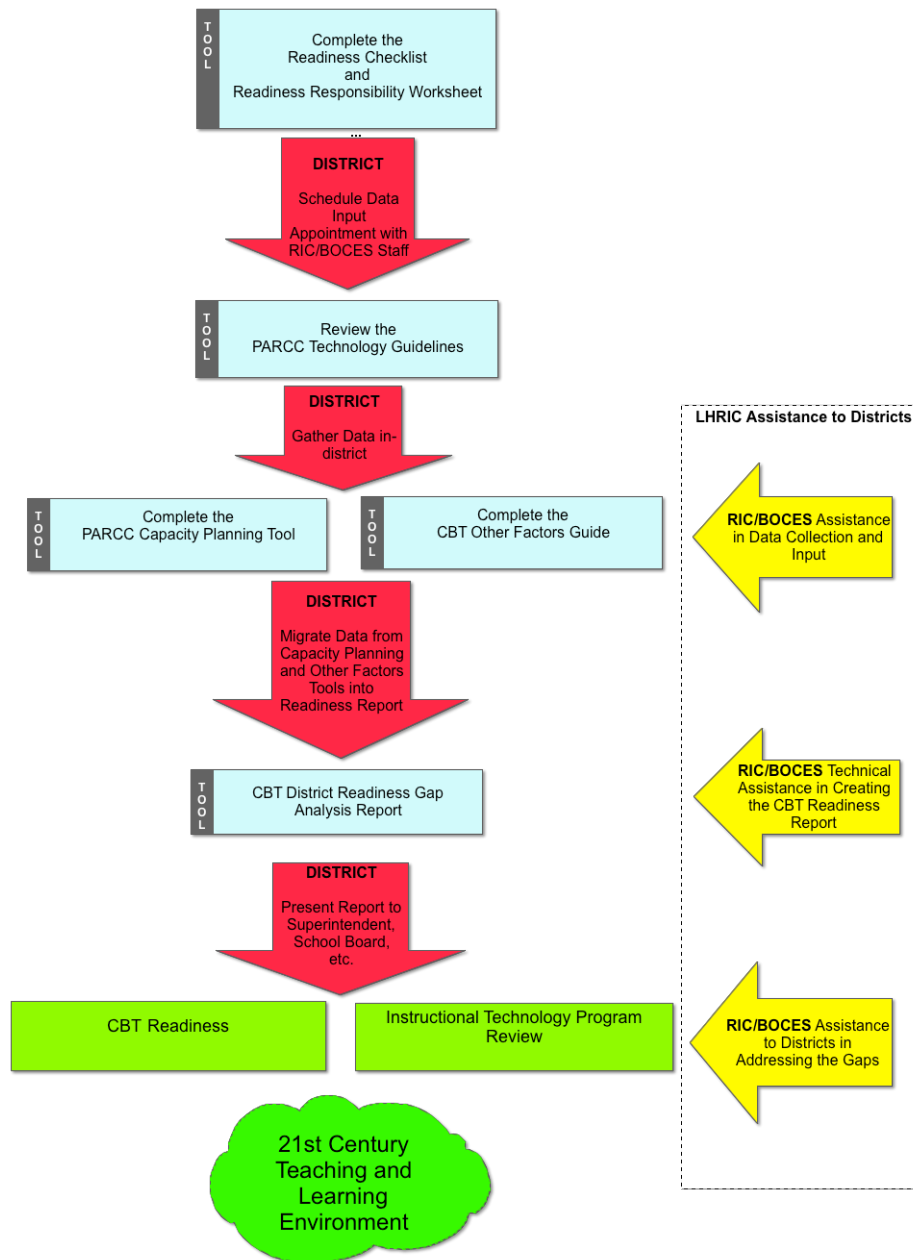
The Relationship Between CBT Readiness and Instructional Technology Readiness

PARCC's computer-based testing is just one component of a broader movement to implement the Common Core standards. Further, the Common Core is part of a still-broader movement to transform the teaching and learning environment in schools. While getting ready for PARCC is a significant undertaking and requires specific allocation of resources, it is important to remember that what all of this is about is something much more far-reaching than just having sufficient technical infrastructure for computer-based testing. In fact, if planned for adequately, those same technical resources that satisfy PARCC testing can -- and should -- be leveraged to create the kinds of 21st learning environments that can truly transform teaching and learning. It is imperative that districts take the time up front to work with their broad community of educational stakeholders to articulate and develop plans for maximizing the use of their improved technical infrastructure beyond the 20 days of PARCC testing.

Investigating and planning for *instructional* technology readiness is a process that includes most of the same steps required for investigating and planning for PARCC readiness, only with different tools focused on different people and different data. Instructional technology readiness focuses on collecting data on curriculum, instructional practice, and professional development. The goal of an instructional technology program review is to determine the extent to which teachers and students are participating in the sorts of technology-infused learning practices that support the acquisition of Common Core (21st century) skills. Once current levels of readiness are determined, the district can proceed to plan on how it will work to close gaps between current practice and desired practice/outcomes. The result of this work is usually a strategic technology plan, of which an infrastructure plan (the product of the PARCC readiness work) is one component.

Districts should make the connections between PARCC readiness and the broader issue of instructional technology readiness in its rationale for acquiring the technology resources necessary for PARCC readiness. The District Readiness Gap Analysis Report tool helps districts roughly frame these connections and provides the links to what should ideally be a comprehensive instructional technology plan.

What is Necessary to Engage in the Readiness Review Process?

The Readiness Review Process is requires much more than the time it takes to complete the various tools contained in this publication. In fact, reaching CBT readiness is the end result of a planning process that requires data gathering, meeting with stakeholders, and reflecting upon the various options, costs, and benefits necessary to create an effective environment for CBT. Districts will want to work collaboratively with their technical service provider (e.g., their RIC or BOCES) to gather data and craft technical and logistical solutions. The CBT Readiness process assumes this work and guides districts through a workflow that involves district staff and technical service providers. The process is therefore built upon a set of assumptions about how the district organizes and prepares for this readiness preparation work.
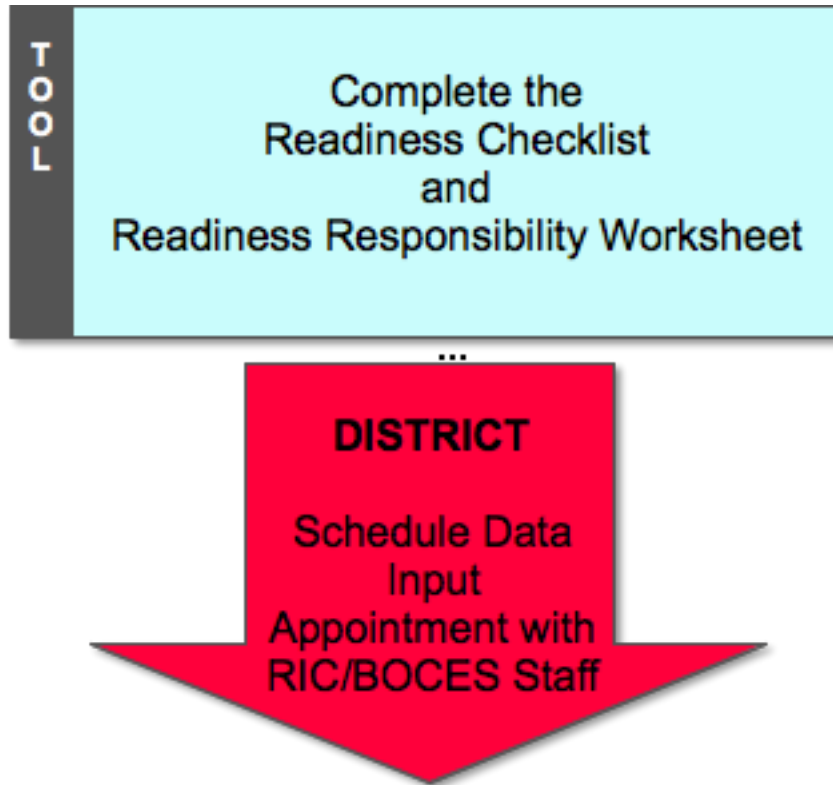
Assumptions and Preparation

The district needs to designate a staff contact to work with the tools and RIC/BOCES technical assistance providers. This district staff must be someone who has the ability to:

- Acquire district technical data – e.g., device counts/inventory, information on device capability/ configuration, network bandwidth information, software/network application use within the district, and technical staffing levels. Typically, a district technology coordinator has this information or can gather it.

- Represent the district's intentions around test administration – e.g., someone on staff who has examined student testing requirements and who can speak to how these requirements are being articulated within the district. Issues such as grades and subjects to be tested and days allocated to testing each school year fall into this category of information.

- Speak to the district's budget and budgeting process – This would be someone who understands the district's budget process as well as the current and anticipated budgets. This is important in terms of accurately framing budget requests and/or fitting requests for new and additional resources (both technical and staffing) into the existing budget.

In order to help districts prepare to efficiently engage with the CBT Readiness Review, we have provided a Readiness Process Checklist. Districts should complete this checklist prior to their first meeting with their external technical assistance provider (e.g,. RIC, BOCES, or Internet Service Provider/Technology Vendor).

Designation of these staff, as well as a timeline for their input and work will be documented in the Readiness Responsibility Worksheet.

Now…

Complete the
Readiness Checklist
and
Readiness Responsibility Worksheet

TOOL

...

DISTRICT

Schedule Data
Input
Appointment with
RIC/BOCES Staff

Readiness Process Checklist

to download an interactive version of this form.

District: _____

Primary District Contact

    Name: _____

    Email/Contact: _____

Please complete this form – and send it to your RIC/BOCES – prior to your district's technical assistance appointment.

	Complete the Readiness Responsibility Worksheet	
	Schedule a Technical Assistance Appointment with RIC/BOCES	
	Inform Those Individuals Identified on the Readiness Responsibility Worksheet of the Date of the Technical Assistance Appointment, and Secure their Participation/Representation	
	Work With District Staff to Acquire/Gather Data	See the Readiness Responsibility Worksheet to determine data categories required as well as who should be responsible for gathering the data.
	District Staff Meet to Discuss Readiness and to Identify Key Issues and Concerns in Advance of the Technical Assistance Meeting	

What are your basic concerns related to CBT readiness? These are concerns that you want to be sure to have addressed through the readiness process.

Responsibility Readiness Worksheet

CLICK HERE to download an interactive version of this form.

District: _____

    Primary District Contact
        Name: _____

        Email/Contact: _____

For each topic below, identify a person who is responsible for collecting and reporting the described information.

| Information Category	Person	Email/Contact
Computing devices (workstations) and device configuration/capacity		
Existing applications and device use		
WAN/LAN bandwidth and other networking issues		
Teacher/student technical support		
District and school testing schedule issues		
District-wide assessment coordinator		

Deadlines Related to PARCC Readiness

    This Year's Testing Window (dates): _____

    Timeframe for District Budget Development Work (dates): _____

    Desired Date For Release of Readiness Report: _____

Now…
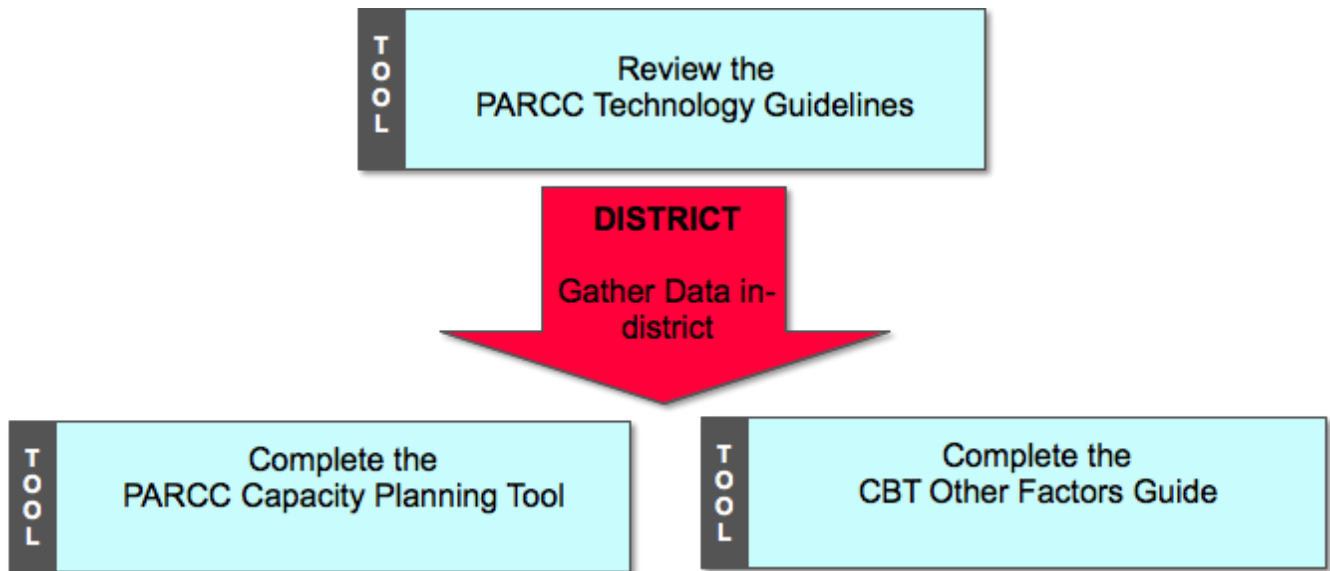
II. PARCC Technology Guidelines, Capacity Planning Tool and CBT Other Factors Guide
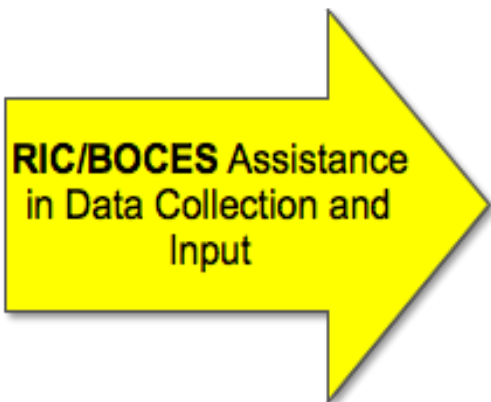
PARCC Guidelines

PARCC has published guidelines for the <u>minimum</u> requirements for computer-based assessment related to the PARCC Common Core tests. These guidelines are available online at http://www.parcconline.org/technology.

The guidelines specify:

- Which devices students can use to participate in the PARCC online assessments
- The amount of bandwidth required to administer the online assessments <u>concurrent with</u> existing district bandwidth needs
- Which WWW browsers are compatible with the PARCC assessment site

Please note that PARCC will continue to update the device and bandwidth guidelines as they are refined through field tests and the test developers. Furthermore, it is possible that state departments of education (e.g., NYSED) will issue guidance on local interpretation of the guidelines. Districts should consult the PARCC Technology website and normal sources of information on state guidelines. **RIC/BOCES staff will also work with districts to keep abreast of any changes in the current guidelines**.

RIC/BOCES Assistance in Data Collection and Input

PARCC Capacity Planning Tool

The PARCC Capacity Planning tool is an interactive spreadsheet that allows districts to calculate the degree to which their devices and bandwidth are capable of meeting the PARCC technology guidelines. PARCC has made the following resources available to districts:

·Capacity Planning Tool Spreadsheet
·Capacity Planning Tool Print Version
·Capacity Planning Tool Example
·Assessment Administration Capacity Planning Tool Users' Guide

In order to complete the capacity planning tool, you will need to have the following information in-hand.

· Information on which grades your district intends to test in the upcoming school year (using the new PARCC CBI assessments)
· Number of days that your district intends to use to administer tests (the PARCC tool assumes a maximum of 20 days)
· Number of computer devices that meet or exceed the PARCC guidelines (see above)
· Information on raw available network bandwidth available at the school level
· Information on existing usage of bandwidth for various instructional and administrative uses (concurrent with testing on testing days)

Refer to your district's completed Responsibility Readiness worksheet for the names of those individuals who have this information. These are the people you need to work with to complete the capacity planning tool.

CBT Other Factors Guide

The CBT Other Factors Guide is a simple checklist and information recording form that helps districts track several other factors (beyond devices and bandwidth) involved in preparing for and administering CBT/PARCC assessments.

For many of these "other" CBT-related issues, there are no fixed guidelines or requirements. Rather, there are simply categories of issues that districts should explore and seek resolution for prior to beginning testing. In some cases, state departments of education will develop and issue guidelines after the 2014 pilot testing period. Therefore, districts should stay tuned to state department announcements and those from the various regional technical support providers charged with assisting districts in the testing process.

Computer-Based Testing Other Factors Guide

[CLICK HERE](#) to download an interactive version of this form.

In preparation for Computer-Based Testing for Common Core (PARCC) assessments, there are a number of issues that districts should consider. Anticipating and properly preparing for these various issues will help ensure a smooth testing experience for all students.

For many of these CBT-related issues, there are no fixed guidelines or requirements. Rather, there are simply categories of issues that districts should explore and seek resolution for prior to beginning testing. In some cases, state departments of education will develop and issue guidelines after the 2014 pilot testing period. Therefore, districts should stay tuned to state department announcements and those from the various regional technical support providers charged with assisting districts in the testing process.

For each of the following categories, please consider the issue and note your district's current plan for how to manage this issue within your testing environment.

Planning/Design

· Who in the district is practically responsible for coordinating <u>all</u> testing activities and ensuring that the district has a viable plan for administering tests?

· When will the district have a final plan in place?

· How will the plan be communicated to building administrators, teachers, and the parent community?

· Is there a date on which the district will have a "dry run" of its testing plan? Specifically, will the district have a stress test of its network and test-related devices <u>prior to the actual test administration</u> so that testing readiness can be ensured for the testing period?

Special Needs/English Language Learner Student Accommodations

Please see the state's guidelines for student accommodations in CBT Common Core assessments. A general policy document related to these accommodations is available from PARCC. Please see this document for an overview of the various considerations related to making accommodations to the computer-based tests. These guidelines will be updated regularly prior to the release of the final tests, and state guidance will always be the final policy on these matters.

· Who will be responsible for working with special education teachers and ELL teachers to identify the various accommodations necessary for our students in the testing grades/subjects?

Physical Space and Requirements

· Where will testing occur in each building?

· Within each testing space, what are the plans for:
  ○ Electrical power (sufficient for all devices and necessary peripherals)
  ○ Network access (routers, wireless, physical cabling)
  ○ Furniture (chairs, tables, desks, spaces for each student and his/her device. NOTE that additional space/furniture requirements may be necessary for SPED students requiring physical accommodations)

Staffing

CBT requires immediate/on-site technical support as well as proctors for student test takers. Proctors need to be familiar with the testing software (i.e., the tests themselves) as well as the actual procedures for students to progress through the tests. Technicians need to be immediately available in the event of a problem with network infrastructure, devices, or other technical snafus.

- One technician should be assigned to each test-taking area and should be on-site during the test-taking period. Who will these technicians be? *NOTE that it may be necessary to bring in extra technicians to support testing.*

- There should be at least two proctors in each test-taking area during the testing period. Who will these proctors be?

- Proctors and technicians need to be <u>fully familiarized</u> with the testing procedures prior to test administration. <u>How</u> will this happen, <u>who</u> will conduct the training, and <u>when</u> will training occur?

Contingency Planning for Interruptions

Each district should create a contingency plan for testing-related emergencies that might result in an interruption to testing. The state department of education is likely to issue guidelines for district contingency planning prior to the testing period. Nevertheless, districts should give thought to how they will handle the following "unanticipated" occurrences:

- Weather delays during testing periods
- Power failures in the testing location
- Network failures
- Other physical interruptions to testing (e.g., fire drills, weather emergencies, lock-downs, other physical personal or building-wide emergencies)

> · What are the district's contingency plans to cover interruptions during the testing period?
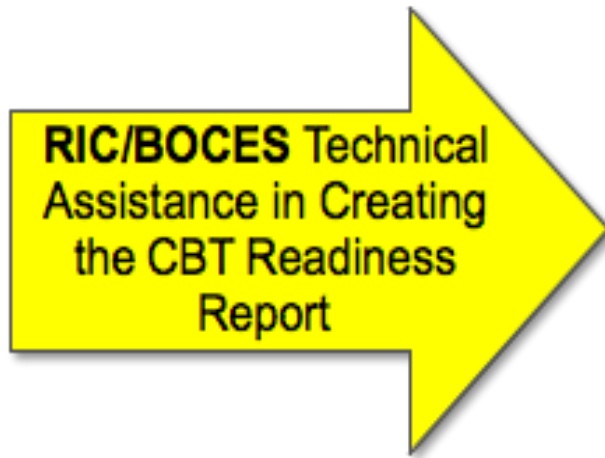
Other Considerations

Use this space to discuss any other considerations or concerns related to your district's plan for administering the computer-based Common Core assessments.

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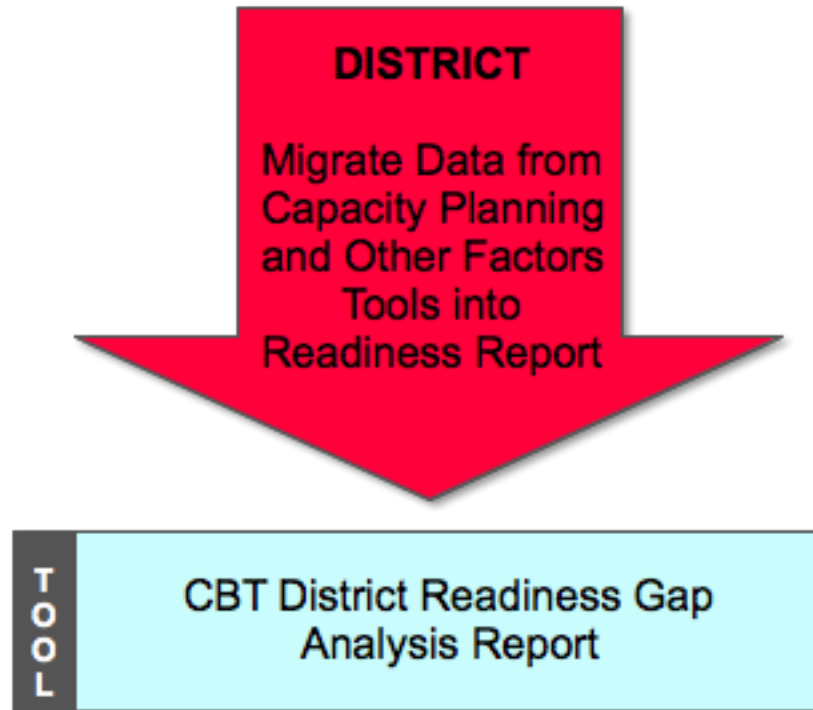
III. The District Readiness Gap Analysis Report

The District Readiness Gap Analysis Report summarizes your district's CBT readiness status and provides information on precisely what your district needs to do to achieve readiness. As a practical matter, this report is the basis for any budget requests that the district needs to make in order to purchase resources required for readiness.

The report also provides a concise discussion of the various other factors and considerations necessary for readiness. In sum, the Readiness Gap Analysis Report is descriptive snapshot of what your district will do in order to be ready to administer computer-based Common Core assessments.

RIC/BOCES staff can provide assistance to your district in completing the Readiness Gap Analysis Report. If such assistance is not available, then simply follow the basic outline of the report provided below. The basic idea of the report is rather self-explanatory. In essence it is intended to be something of a proposal (not unlike a grant proposal) made to your district's funding authorities to concisely describe in a single, easy to read, document what your district needs to do in order to reach a state of CBT readiness. The report "sells" your proposal/request for reaching CBT readiness.

CBT Readiness Gap Analysis Report

[CLICK HERE](#) to download an MS Word report template of this report.

District: _____

Primary District Contact: _____

Abstract/Summary

As of **[date], [district name]** has completed a thorough review of its readiness to administer the computer-based testing components of the **[school year]** Common Core assessments. This review has found that in order to administer the assessments to **[grades, buildings, student cohorts],** we need to address the following deficiencies in our technology infrastructure:

Devices:

- We need **[number]** additional computer devices in order to meet the minimum recommendation of having 1 device per 2 test-taking students during testing period.
- We need to upgrade **[number]** devices with **[browser, operating system, etc.]**
- We need **[number]** keyboards; **[number]** mice/pointing devices; **[number]** audio devices such as headphones, earphones, or speakers.

Network Bandwidth:

- We need to upgrade the network bandwidth coming into our district to **[bandwidth]**.
- We need to upgrade intra-building and LAN bandwidth. This will be accomplished by **[state method]**

Network Configuration:

- In order to enable proxy-caching, a way of reducing bandwidth requirements and improving network access for test-taking students, we need to **[state method]**
- We need to upgrade our network infrastructure by **[state method, egg., adding switches, expanding wireless, etc.]**

Technical Support:

- During the testing period, so as to ensure integrity of data and access to the testing software, we need to allocate **[number]** technicians to be on-call within the district and ready to respond immediately to any device or network technical issues. This will impact our district's technical support by **[state reason/rational/solution. e.g., hiring temporary staff, suspending "normal" technical support for the district, etc.]**.

Space:

- During the testing period, testing will occur in the following locations. **[name locations]** It is anticipated that these locations will be secured, and therefore

Proctoring:

- It is estimated that we will require **[number]** of staff days for exam proctoring. It is suggested that we address these needs by [state method]. This **[will/will not]** involve the outlay of personnel expenses **[in the amount of _____]**.

Test Administration for Special Needs Students:

- In order to accommodate the test taking needs of our special needs students, we need to make the following accommodations: [state accommodations]. This will come at a total cost of [cost].

BUDGET REQUEST SUMMARY

Category	Expense
Devices (computer hardware)	
Software (browsers, upgrades to OS, etc.)	
Peripheral Devices	
Networking Hardware	
ISP/Bandwidth Services	
Labor	
Technicians	
Contract Technical Services	

Discussion

Description of the Readiness Assessment Process

Devices

Bandwidth

Network Configuration

Technical Support

Space

Proctoring

Special Needs Considerations

Other Considerations

Now…

DISTRICT

Present Report to Superintendent, School Board, etc.

CBT Readiness

Instructional Technology Program Review

21st Century Teaching and Learning Environment
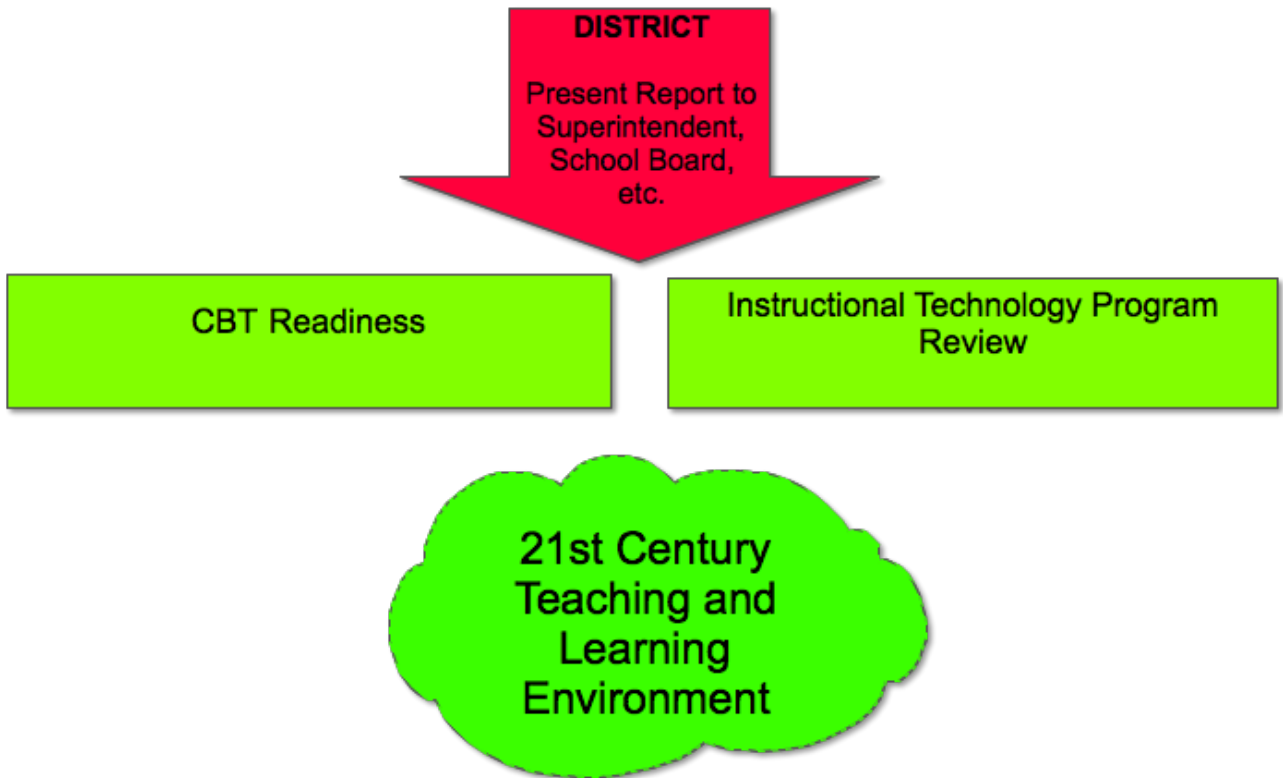
IV. Implementing Your Readiness Plan

Sharing the Report and the Plan

One of the main aspects of readiness cannot adequately be captured on a form or checklist. Ultimately, readiness happens when everyone involved in your district's testing activity is "on the same page" with regard to your plan for testing and testing administration. Therefore, it is essential that once you have developed a readiness and testing plan that you share this plan widely within the district community.

The first step in sharing the plan is to share the outcomes of this report. Certainly it is important to share the report with your Superintendent, business manager, and ultimately the school board. In most cases, sharing is essential in that the Board will need to incorporate various aspects of the plan/report into its budget process. Most districts will find that readiness involves purchasing devices, services, and allocating personnel time. These are financial decisions that need to be made and incorporated into the budget.

Beyond budgeting, it is equally important that districts share the broad details of how testing will occur within the district. In particular, attention should be paid in describing the differences – and similarities

– between the new computer-based tests and traditional standardized testing. Part of this explanation may well be a discussion of the Common Core itself, as many parents are likely to be unclear as to the objectives of the Common Core (with its increased emphasis on thinking and learning skills). Therefore, weaving information on CBT in with other planned communications about the Common Core and new standards may be quite beneficial to parent understanding and involvement.

Connections to Your District Technology Plan

PARCC/CBT readiness is just one component of your district's overall ability to meet student and teacher instructional technology needs. Much of what has been discussed as "CBT readiness" is represented by the technology infrastructure component of a comprehensive district technology plan. Of course, the other components of a district technology plan include:

- Teacher professional development in the various pedagogies that are supported by technology
- Development of the various curricular connections between student technology use and the development of thinking and learning skills
- Acquisition of additional classroom technology resources that support curriculum standards and learning outcomes
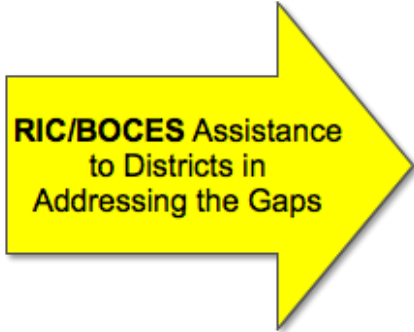
All of these components go well beyond simply having technology infrastructure in-place to support computer-based testing, and yet these are the uses to which your teachers will put technology during the bulk of the year where no testing occurs. This is an important argument for districts to make when seeking community support for purchasing technology infrastructure.

In order to provide support and validity to this "bigger picture" argument, most districts will need to engage in a thorough examination of just how technology (such as that acquired for CBT readiness as well as additional technologies) will support the full range of teaching and learning activities in the district. This examination and related process should include:

- A thorough assessment of the current status of technology integration in classrooms across the district (i.e., an instructional technology program review/audit)
- Development of an organizing, comprehensive, well-communicated vision and strategic goals for technology's role in teaching and learning and the meeting of rigorous curriculum standards
- Development of concrete action plans for implementing the district's technology goals

Your RIC/BOCES is a good first place to look for assistance related to technology program reviews and planning.

Assistance in Implementation

Your RIC/BOCES offers assistance to districts around many aspects of CBT readiness. These include:

·Internet service
·Network management
·Purchasing of workstations and peripherals
·Planning, evaluation and advocacy for instructional technology implementation

Please contact your RIC/BOCES for more information on services for your district.
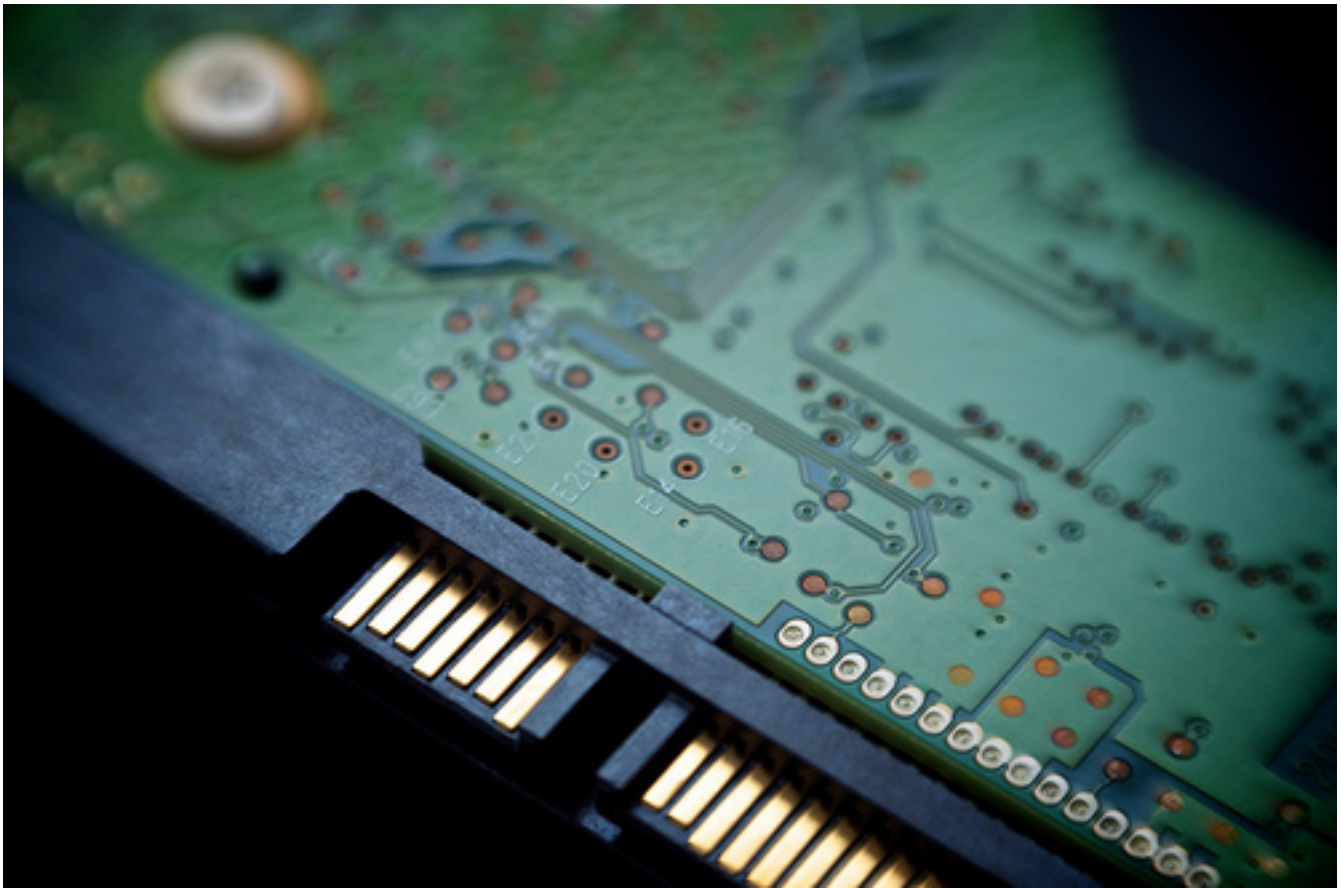
V. Attachments/Appendices

Glossary of Terms

Bandwidth – This term refers to a measure of how much digital data and information may be communicated into and out of your district's network. Note that there are several places on a typical where bandwidth may be measured, and thus when discussing the concept you should be sure to specify what part of your network you are assessing. In general, you should know the bandwidth your district has to the Internet (this is often referred to as the size of your "pipe" to the Internet and is typically what you purchase from your Internet Service Provider); the bandwidth between various buildings and locations within your district (this is usually called wide area network or WAN bandwidth); and the bandwidth available on your local area network (LAN).

CBT – Computer Based Testing

Common Core – Also known as the Common Core for Learning. Visit the Common Core State Standards Initiative for more information on the Common Core.

ELL – English Language Learners. These are students who are provided with additional educational support as they work to develop spoken and written skills in English as a second language.

Existing Applications – This term refers to the various network-dependent digital applications that currently use network bandwidth on your network. Examples of existing applications are: email, WWW browsing, streaming video (YouTube, Discovery, etc.), online learning systems, computer based instruction systems, etc.

IEP – Individual Education Plan. Traditionally, Special Education Students have IEPs that structure and guide the educational services they receive.

ISP – Internet Service Provider. This is the generic name for a company or organization that sells your district its bandwidth to the Internet (i.e., you lease "your pipe" from the ISP). ISPs typically provide you with various informational and management tools useful for managing your access to the Internet.

LAN – Local Area Network. This is the network that connects computers (and servers, etc.) locally in your school. LANs may be wired or wireless.

Network – A generic term that refers to the connection between computing devices.

PARCC – Acronym for "Partnership for Assessment of Readiness for College and Careers". PARCC is one of two consortia of states that are developing assessments for the Common Core standards. The other consortium is named SBAC.

Peripheral Devices – Various electronic devices that are typically attached to computer workstations for the purposes of data input or output. Examples include keyboards, mice, touch pads, printers, etc.

Proctor – Someone assigned to the task of physically overseeing students taking a test.

Readiness – A state of being where a district is adequately prepared, and ready, to participate in an activity or range of activities. Practically, CBT or PARCC readiness refers to the condition where a district is ready to support its students in taking computer-based assessments.

SBAC – Acronym for "Smarter Balanced Assessment Consortium". SBAC is one of two consortia of states that are developing assessments for the Common Core standards. The other consortium is named PARCC.

Technical Support – Technicians and data administrators (e.g., network managers) who are assigned the task of supporting the end users of computer-based testing systems. Conventionally, this refers to the ability of a district to have technicians "standing by" to assist students and teachers in the event of technical difficulties in using information technology.

Testing Window – The period of time during which Common Core CBT (and perhaps other standardized assessments) occur in your district. Each district defines its own specific testing window that meets state guidelines.

WAN – Wide Area Network. Conventionally, this is a "network of networks".

Workstation Device – A computer or computing device used by a student for computer based testing. See the PARCC Technology Guidelines for more information on what type of computer qualifies for use with Common Core computer-based assessments.

Useful Links

Bit Calculator -- www.matisse.net/bitcalc
>   Use this online calculator to convert bits, bytes, kilobytes, megabits, megabytes, etc.

Common Core State Standards -- www.corestandards.org
>   Information on the Common Core Learning Standards by the creators of the Common Core -- the Council of Chief State School Officers (CCSS) and the National Governors Association

NETS (National Educational Technology Standards) – www.iste.org/standards
>   The ISTE NETS standards

PARCC -- www.parcconline.org
>   Up-to-date info from PARCC

Partnership for 21st Century Learning Common Core Toolkit
www.p21.org/tools-and-resources/p21-common-core-toolkit
>   This toolkit does an excellent job of showing how the Common Core aligns with 21st century learning skills.

NYSED -- www.p12.nysed.gov/ciai/common_core_standards
>   Information on NY's implementation of the Common Core

Sun Associates – www.sun-associates.com
>   Sun Associates is the creator of the CBT Readiness Review Process and provides assistance to school districts in NY and nationwide in evaluating instructional technology.