

## Preparing for NeSA Online Assessments & Evaluating School Capacity

The purpose of this document is to provide Nebraska district and school administrators and technology specialists assistance in gauging readiness to participate in online NeSA testing. On the following pages, we identify issues that will need to be considered when beginning the planning process for NeSA online testing. This documentation will help you determine your school's capacity for online testing through the CAL online system.

### Technology Infrastructure and Technical Support

#### 1. Computer infrastructure:

The first step in assessing your online testing capacity is determining the number of computers that you have available for online testing. Computers to be used for testing must meet the system requirements described below and should also be located in an area where students can be supervised by a teacher or test coordinator during the testing process.

- A. Operating system:
  - i. Windows 98, NT, ME, 2000, XP, 2003, Vista, 7, 2008
  - ii. Mac OS X 10.3 (with Java 1.4) or 10.4 and above
- B. Memory: 64 MB of RAM, 128 MB recommended.
- C. CPU Processor: 200 MHz or higher.
- D. Display: screen resolution of at least 800 X 600 pixels.
- E. Extra Requirements to support Visual Accommodations
  - i. Processor: 1 GHz, 1.5 GHz recommended
  - ii. Memory: 512 MB, 1 GB recommended

Number of Computers Available for Testing \_\_\_\_\_

#### 2. Internet connectivity and bandwidth

All computers to be used for online testing must be able to connect to the Internet. The actual download speed or bandwidth requirements for your school are very minimal. However, in the event you anticipate large numbers of simultaneous test administrations (greater than 150) or have an unreliable internet connection, we have developed a caching technology called CAL's Local Caching Software (LCS) that allows the caching of test data in a computer located in the school network. Caching test content greatly reduces the amount of bandwidth required for electronic testing and this technology eliminates the need of multiple downloads of test data. Data is downloaded one time to your school network and subsequently all students are administered test data from the local copy. This solution significantly reduces the bandwidth requirements allowing schools with minimal bandwidth to successfully test large number of users. Additionally, the LCS allows students to continue testing in the event of technology interruptions.

For instance, schools with a T1 Internet connection (1.544 Mbps), which is the most common school network capacity, can install the LCS, resulting in local capacity of 1200 simultaneous users. If two instances of the LCS are locally installed, the testing capacity will double (2400 simultaneous users) for that school. Schools with a lower Internet connection such as dial-up (56Kbps) will be able to test up to 300 simultaneous users with a single instance of the LCS. The LCS needs to be installed in a local school system and the minimum system requirements for the computer to be used as the LCS are detailed below.

LCS System Requirements:

- A. Operating System:
  - i. Windows 2000, NT, XP, 2003, Vista, 7, 2008
  - ii. Mac OS X 10.4 (with Java 1.5) or 10.5 and above
  - iii. Linux
- B. CPU Processor: 1.2 GHz or higher.
- C. Memory: 512 MB of Available RAM. 1 GB Recommended.
- D. Disk Space and File Permissions:
  - i. Minimum 512 MB of free space available in the LCS installation folder
  - ii. Full Permissions to create or write to any files in the LCS installation folder.

Are your computers connected to the internet? \_\_\_\_\_

Do you have a computer capable of running the Local Caching Software? \_\_\_\_\_

Do you have at least a T1 (1.544 Mbps) Internet connection available to your school? \_\_\_\_\_

If you have answered “yes” to the above questions and anticipate large numbers of simultaneous test administrations or have unreliable internet connectivity, the LCS configuration is recommended.

Note: To determine the bandwidth available in your schools you can contact your technology coordinator or your Internet Service Provider.

## CAL Online Testing School Capacity Calculator

Because of the LCS technology, school bandwidth is not the primary factor when determining online testing capacity; rather, the most important issue is the number of computers available for testing in your school. Other important factors in determining online testing capacity include:

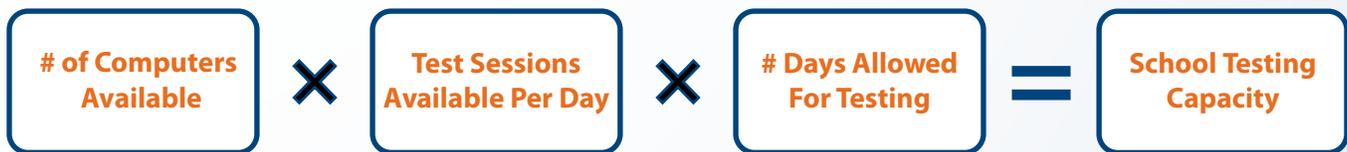
### 1. Number of Test Sessions Available per Day:

This is the number of test sessions you can administer per day. The length of the tests (typically between 60 to 90 minutes) will determine how many test sessions you can schedule per day in your computer lab(s).

### 2. Number of days available/allowed for Testing:

This number will depend on the length of the testing window determined by the Nebraska Department of Education (NDE), and the number of days you have access to your computer labs within that testing window.

The formula below can be used to compute your school testing capacity. An online version of this tool is available on the NeSA online testing portal webpage at <http://nesa.caltesting.org>. This information can assist in scheduling and planning activities.



For example, if a school has 100 computers available for testing, can schedule 4 test administrations per day, and has 25 days available for testing their school testing capacity will be:



## Technology Training Sessions

A series of Technology Training Sessions have been scheduled by NDE that will cover the following topics:

- Overview of CAL's NeSA online assessment system
- System Requirements
- Computer Lab Configurations
- Installation Process
- Remote Installations
- Server Installations
- Firewalls/Filters
- Software Updates
- What's new?
- Questions?

## Frequently Asked Questions

Answers to commonly asked technical questions regarding CAL's online assessment system are located on the NeSA online testing portal webpage at <http://nesa.caltesting.org/documentation/index.html>

If you have additional questions that we can provide assistance with, please contact our NeSA technical support center:

1-866-342-6280

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