



## 2018-19 CTE End-of-Program (EOP) Assessment Online IT Requirements

### TECHNICAL SPECIFICATIONS

CTE EOP Assessment is administered through the TFI online assessment system, E-SESS. Please review the following technical specifications provided by TFI and KDE to ensure a smooth testing experience. District Assessment Coordinators (DACs), Building Assessment Coordinators (BACs), and Principals should communicate with Building and District Technology Coordinators to confirm all guidelines in this document are addressed.

**Browser:** The testing program is supported in Firefox and Chrome on all platforms. IE 11 and Edge are supported on Windows. Firefox or Chrome should be used on Mac OS X.

#### KDE Specific Browser Update:

- *Only Firefox or Chrome should be used on Mac OS X. An issue has been reported with Safari.*
- *Chrome is preferred instead of IE11 on Windows.*

Other browsers beyond what is listed above may work, but the specified browsers are the only versions actively tested and supported. We will try to help with any other browsers or older versions, but we offer no guarantees. Bandwidth may be an issue if it's not "dedicated." A school may have 5 T1s, but if they have 50 students in the library streaming videos, the entire pipe is going to be used. The bandwidth estimation of this requirement is based on 150–200 students simultaneously taking the test on a dedicated T1 and experiencing no delays.

**Reporting:** In some cases, in-browser reports are augmented with spreadsheet and/or PDF documents. Excel (or compatible) and a PDF reader (such as Acrobat Reader) are optional but not required.

**Audio:** Using the audio feature requires additional bandwidth; you may notice slower response times during testing. CTECS recommends using wired computer Internet connections. Audio is played using HTML 5 technology.

**Display Properties:** The testing program is best viewed at 1024 x 768 display resolution or higher. It will work at 800 x 600.

**Bandwidth:** The bandwidth recommendation is a T1 line for every 150 simultaneous users. The T1 may be able to serve additional students; however, student populations greater than 150 per site have not been tested and confirmed by TFI.

**Memory:** There are no specific requirements for the CPU, RAM, etc. If the machine will run the browser, the E-SESS application will run.

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**Proxy Server Settings:** Make sure that the proxy server will not cache Techfluency.org. Responses must be sent directly to the E-SESS (Techfluency) server. Do not begin testing students until Proxy Server settings allow communication to flow to and from the E-SESS online testing system. Otherwise, the students will finish the test and receive a 0 score.

Be sure to take the sample test (see next section) to test your devices and system. The timer (clock) should display correctly on the screen; if not, there is a problem and students cannot test until it is resolved.

During testing, if you notice that the timer (clock), displayed on the student's screen looks "garbled" or undefined, there is something blocking the content. Students should **NOT** continue to take the test. Proctors should stop testing and contact CTECS and the IT personnel at the location to resolve the issue.

**Sample Test:** Access the sample test at each location before students begin testing. This ensures that there are no proxy servers preventing access to the site, no software packages preventing cookies/sessions from being stored, etc. The sample test may be accessed multiple times by individual users.

## To access the sample CTE EOP ASSESSMENT test:

1. Go to [www.techfluency.org/esess/](http://www.techfluency.org/esess/)
2. Make the following entries into the four blanks:

Organization: KYEOP

First Name: Sample

Last Name: Sample

Password: Sample

Site URL:	www.techfluency.org/esess
Org. Name:	KYEOP
First Name:	Sample
Last Name:	Sample
Password:	Sample

3. Click **Log In**.
4. Click **Continue**.
5. Click **Begin**.

**Note:** At least one graphic should be visible and the timer should be visible and clearly readable throughout the test.

**Firewalls and server settings:** Be sure that the IP addresses are not blocked.

**IP Information:** There are 2 load balanced front end servers for Techfluency.org (the testing site):  
174.129.233.219  
184.73.202.76

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The only exception will be images and audio (text-to-speech feature) used on the tests. The images are hosted on Amazon's S3 servers. Server name: media.techfluency.org

### **District Guidelines for Network Activity Moratorium During Online Testing:**

The following is a list of recommended best practices for district technology personnel to have in place during scheduled online testing windows in their district.

Use of these recommendations will greatly improve the testing experience for the students and reduce or eliminate possible activity that could impede the online testing system. These guidelines apply to all online tests. They were specifically designed to focus on best practices and lessons learned from past testing sessions.

### **Most Importantly:**

Communicate with the DAC or ATC Principal to make sure you have these guidelines in place to meet their scheduled tests.

### **During Testing Windows:**

1. Disable Wireless Guest Networks
2. If a district has Routers within their LAN, establish QOS Rules to Prioritize Access to Testing Sites
3. Whitelist Testing Sites IP Addresses (Proxy/Internet Filter)
4. Restrict or Ban Certain Network Activity During Testing Window. This should include:
  - a. Video Streaming (Youtube, Discovery, Netflix, Hulu, Hudi, Etc)
  - b. Audio Streaming (Pandora, iHeartRadio, Slacker, etc.)
  - c. Large Data Moves or Backup/Restoration Projects
  - d. Alterations to LAN Network Equipment
  - e. Removal or Additions to Network LAN
  - f. System Updates (OS Updates, Patches, Software Updates, etc.). These Should Be rescheduled for after the test window
  - g. App Updates or Downloads. These should be scheduled for after the test window
  - h. Video Conferencing

### **TIPS AND SOLUTIONS**

The students are using an online assessment tool called E-SESS. The website is [www.techfluency.org](http://www.techfluency.org). The following details a few problems you may experience including suggested actions to either diagnose or fix the problem.

### **If the students are having general connection issues, check the following:**

- If possible, check the packet loss in the lab.
- Perform a traceroute to [www.techfluency.org](http://www.techfluency.org) to see if the connection to E-SESS is OK and packet loss is minimal.

**Next refer to the following troubleshooting steps:**

1. The test will not load at all. The student clicks the Begin button but the page never opens.
  - a. Check for a pop-up blocker.
  - b. Check the firewall and/or proxy server to see if [www.techfluency.org](http://www.techfluency.org) is being blocked.
  - c. Close all open browser windows (even any minimized ones). Try again. It is possible for the test to already be open and just be minimized or for an open window to prevent the test from opening.
2. The student clicks Begin and the page opens, but the test never appears.
  - a. Check the browser version. The testing program is supported in Firefox and Chrome on all platforms. IE 11 and Edge are supported on Windows. Firefox and Chrome are supported on Mac OS X.
  - b. Try just closing the assessment and click Begin again.
  - c. Check for any specific errors showing up and contact CTECS with the exact error message.
3. "The students keep getting disconnected." The message on the screen should be something like "Please wait while your test is being loaded. The connection to the server has slowed or stopped..."
  - a. This means the AJAX call to E-SESS failed. This could be due to server packet loss on an overloaded network. When the student begins the test, it will download about 100K, but the typical transaction after that is only around 10K, so it doesn't require much bandwidth. You might also check to see if a firewall or proxy server is blocking communication with [www.techfluency.org](http://www.techfluency.org).
4. The test is going really slow. Each question takes more than ten seconds to load.
  - a. The simplest check is to see if it is the computer itself. Check the browser to be sure that it is adequately responsive when changing to other sites, such as, the local school website. If the computer seems acceptable, try a connection speed test, such as, <http://speedtest.net>. Run the test to see if the numbers are abnormally low.

**If you have any technical concerns prior to the test, please contact CTECS via phone or e-mail.**

**Tim Withee - (404) 994-6535 or [twithee@ctecs.org](mailto:twithee@ctecs.org)**

**Robyn Marshall - (678) 226-9000 or (404) 994-6534 or [rmarshall@ctecs.org](mailto:rmarshall@ctecs.org)**