

# Assistive Technology Guidelines

Updated 12/22/2021

These guidelines provide guidance for schools to determine if certain assistive technology (AT) already in use by students with disabilities may be used and how to test the functionality of certain assistive technology for possible use on the assessments.

For students using assistive technology, including screen readers and other AT applications, this must be indicated on the student's Student Registration/Personal Needs Profile (SR/PNP) prior to testing within PearsonAccess<sup>next</sup>, located in the Pearson training center.

Assistive technology may not have embedded grammar check, connect to the internet, or save information. If these features cannot be disabled or monitored closely by an administrator, the device should not be used on an assessment.

The online assessment platform used to deliver assessments (TestNav) is designed to comply with the [World Wide Web Consortium \(W3C\) Web Content Accessibility Guidelines \(WCAG\) 2.0, Level AA](#). In order to be compatible with the online assessment platform, browsers and assistive technologies should comply with the W3C's [User Agent Accessibility Guidelines \(UAAG\)](#) and support WCAG 2.0, Level AA and the [Web Accessibility Initiative \(WAI\) - Accessible Rich Internet Applications \(ARIA\)](#) recommendation from the W3C. All assistive technology that is required to interact with the online assessment platform, but does not conform to W3C standards and guidelines, may present challenges for students during testing.

There are **two** categories of assistive technology for use in assessments.

## Category One: Compatible Assistive Technology

The **first** category includes assistive technology that is used by the student to interact directly with the computer-based testing platform. These assistive technologies include third-party software applications such as screen readers, as well as standard input devices, such as adaptive keyboards, adaptive mice, and switch interfaces. Schools must confirm the functionality of the devices and software within their technology environment prior to testing by conducting a simulation of the day-of-testing environment. This can be completed in two phases.

### Phase I

The Practice Tests are available through the resource support site or the TestNav desktop app. These practice tests are non-secure and provide students with exposure to test content and interactions. There are multiple versions of practice tests available. To test the functionality of assistive technology, select the appropriate practice test within each grade/subject tab.

Choose the

- Accommodated Screen Reader version if testing with a screen reader or the
- Accommodated Non-Screen Reader version if testing with other assistive technology that is not a screen reader.

**Note:** Phase I is not via a secure student login. It is intended only to provide students with access to gain exposure to content and item interactions within the assessment. Phase II must be completed to confirm functionality in a secure assessment.

## Phase II

The PearsonAccess<sup>next</sup> Training Center will include the capability to verify assistive technologies within the secure versions of the practice tests. The instructions for conducting an infrastructure trial are available in the **Infrastructure Trial Readiness Guide** available through the resource support site. Verification will require completing the same registration and PNP process used for operational assessment in the PearsonAccess<sup>next</sup> Training Center.

These activities will assist districts, schools, and students to determine whether their assistive technology will interact appropriately with the TestNav assessment platform and whether it can be used successfully during computer-based testing. An infrastructure trial will also allow students to interact and gain familiarity with the actual computer-based interface.

Assistive Technology is supported for use within the TestNav desktop app. The app supports the use of most Assistive Technologies.

Variability has been found in the compatibility of different assistive technologies other than screen readers with the TestNav app. Because of this, it is required that each user undergo infrastructure trials where the students' AT can be tested in a secure TestNav environment. The intent is to confirm if the assistive technology will interact appropriately with the TestNav assessment platform and whether it can be used successfully during computer-based testing.

**NOTE: Browser-based TestNav is no longer supported using the Firefox Extended Support Release – Mozilla discontinued support of required browser plugins. The TestNav desktop app must be used for all secure assessment.**

As a result, assistive technologies that rely on browser toolbars or student login for individual student account login will not work in the TestNav desktop app. Examples like Co-Writer and Read&Write must be used as Category 2 External Assistive Technologies defined below.

TestNav Technology guidelines provide detailed information on minimum system specifications. The guidelines are available at [TestNav System Requirements](#).

A list of assistive technologies that will **not** be prevented from running with TestNav security is as follows:

<b>Product</b>	<b>Vendor</b>
JAWS – Standard	Freedom Scientific
JAWS – Professional	Freedom Scientific
WYNN	Freedom Scientific
WYNN	Freedom Scientific
MAGic (with Speech)	Freedom Scientific
NVDA	NV Access
Window-Eyes	Ai Squared (GW Micro)
Window-Eyes	Ai Squared
ZoomText Mac	Ai Squared
ZoomText Magnifier	Ai Squared
ZoomText Magnifier/Reader	Ai Squared
ZoomText Fusion	Ai Squared
Kurzweil 3000 Windows	Cambium Learning (Kurzweil)

Co-Writer	Don Johnston
Read: OutLoud	Don Johnston
Switch Interface Pro	Don Johnston
Snap&Read Universal	Don Johnston
Kinderboard	Chester Creek
Headmouse Extreme	Origin Instruments
AbleNet Wave Rollerball	AbleNet Inc.
IntelliKeys (with Overlay Maker 3.5)	AbleNet Inc.
Kinderboard	AbleNet Inc.
BigKeys Keyboard	AbleNet Inc.
BIGtrack Trackball	AbleNet Inc.
Dwell Clicker 2	AbleNet Inc.
BigBlu VisionBoard	AbleNet Inc.
Blue 2	AbleNet Inc.
The Grid 2	AbleNet Inc.
The Grid 3	AbleNet Inc.
IntelliKeys USB Keyboard	AbleNet Inc.
Hitch Computer Switch Interface	AbleNet Inc.
Keys-U-See Wireless Combo Keyboard and Mouse	AbleNet Inc.
LessonBoard Keyboard	AbleNet Inc.
LearningBoard Keyboard	AbleNet Inc.
myGaze Assistive 2	AbleNet Inc.
TrackerPro	AbleNet Inc.
VisionBoard Wireless Keyboard	AbleNet Inc.
Roller Plus Joystick	Traxsys
Touch Screen	Traxsys
Cross Scanner	RJ Cooper & Assoc.
Reach Interface Author	Applied Human Factors
WordQ 4 (Mac)	goQ Software
wordQ + speakQ	goQ Software
Read&Write for Windows	TextHelp
Read&Write Gold for Mac	TextHelp
Dragon Naturally Speaking	Nuance Communications
Maestro	DynaVox
Vmax+	DynaVox
Tobii CEye	Tobii
Accent 700, 800, 1000 & 1200	Prentke Romich Company
ECO2	Prentke Romich Company
Magic Touch	KEYTEC Inc
SwitchXS	AssistiveWare
Braille Sense U2	Hims Inc
Brailliant BI32	HumanWare
BrailleNote Apex	HumanWare
Mywe Fast Typer	Mywe
Typing Assistant 2	SumitSoft
ChromeVox	Google
VarioUltra Braille display	Baum Inc

## IMPORTANT NOTES about Operating Systems and Assistive Technology use:

- Chromebooks:
  - The only Assistive Technology that can be used on Chromebooks interacting directly with TestNav is ChromeVox—the screen reader embedded within the Chromebook Operating System. Accessibility testing has shown that no barriers exist.
  - Chromebooks cannot be used with any other Assistive Technology interacting directly with TestNav. Chromebook extensions are blocked when in Kiosk mode (Required for secure assessment).
  - Chromebooks can be used as a stand-alone Assistive Technology for response accommodations as defined in the Accommodations Manual. If you plan to use a Chromebook or iPad as a third-party external assistive technology device, contact your state department for additional guidance for administration.
  - Embedded operating system (OS) Accessibility Features must be disabled unless otherwise allowed per the students Individualized Education Program (IEP). If not disabled, they will be active during assessment as they can't be blocked by TestNav. Examples for Chrome OS include ChromeVox and Sticky Keys.
  
- macOS and iOS—iPads
  - Must be full size iPads only (no iPad Mini).
  - Refer to TestNav System Requirements to determine supported iOS.
  - VoiceOver for iOS is not allowed for use on the assessments. There is currently no configuration that will provide a barrier-free testing experience for VoiceOver users on iOS systems. The Pearson TestNav and Accessibility teams are working with Apple to include improvements in future releases.
  - Embedded operating system (OS) Accessibility Features must be disabled unless otherwise allowed per the students Individualized Education Program (IEP). If not disabled, they will be active during assessment as they can't be blocked by TestNav. Examples for macOS and iOS include Voiceover, Sticky Keys, Speak Selection, and Speak Screen.
  
- Windows
  - Embedded operating system (OS) Accessibility Features must be disabled unless otherwise allowed per the students Individualized Education Program (IEP). If not disabled, they will be active during assessment as they can't be blocked by TestNav. Examples for Windows OS include Windows Narrator, Windows Speech Recognition, and Sticky Keys.

## Category Two: External Assistive Technology

The **second** category includes “stand-alone” assistive technology that does *not* interact directly with TestNav and is not accessed on the same device used by the student to complete the computer-based assessment. Instead, this will be used by the student at a separate station during the assessment. Assistive technologies in this category include speech-to-text, augmentative communication, word prediction, self-contained word processors, and other technologies not directly connected to the computer on which the student is being tested. These “stand-alone” assistive technologies do not need to be tested via an Infrastructure Trial and may be used during the, according to the provisions of the accommodations policies. However, they may require an adult test administrator to assist the student with transition between the computer used for assessment and the external assistive technology.

All responses generated on a “stand-alone” assistive technology device must be transcribed verbatim by a test administrator to the student’s computer-based test or into the accommodated answer document. Please refer to the Protocol for the Use of the Scribe Accommodation and for Transcribing Student Responses available in the accommodations manual for steps that must be followed when transcribing a student’s response.

**NOTE:** If stand-alone assistive technologies are used for the assessments, all grammar check, internet access, and stored file functionalities must be disabled.

If you plan to use a Chromebook or iPad as a third-party external assistive technology device, contact your state department for additional guidance for administration. Reference the Accommodations Manual for more detailed instructions.