

## **Guidelines for Using Assistive Technology as an MCAS Test Accommodation (Updated: April 2018)**

These guidelines will assist schools in determining which assistive technology (AT) applications may be used by students with disabilities for computer-based MCAS testing. Assistive technology includes applications such as word prediction, text-to-speech, screen readers (for students with visual impairments), screen magnification; plus devices like adaptive keyboards, adaptive mouse, and switch interfaces. AT can be sorted into three broad categories:

1. Tools and supports that are **already included** as part of the TestNav8 computer-based testing platform;
2. AT that is external to TestNav8 (i.e., is provided to the student by the school), but is **compatible** with the testing platform and can be used on the same computer used for computer-based testing; and
3. AT that is *not* compatible with TestNav8 and therefore **must be used on another device** at an adjacent computer station.

### **Category One: Assistive Technology already included in TestNav8**

Many universal accessibility features and accommodations are already embedded within the TestNav8 testing platform that can be used by any student taking the computer-based test. Some features will need to be selected in advance, while others are automatically available to all students.

#### **Accommodations selected in advance**

- Text-to-Speech, which reads the text aloud to a student, highlighting each word as it is read
- Spell Checker (on the ELA tests, for students who have this “special access” accommodation listed in their IEP or 504 plan) \*

#### **Features available to all students:**

- Screen magnification
- Alternative background and font color (color contrast) \*
- Answer Masking \*
- Line reader tool, which hides portions of the text not being read by the student
- Calculator (for the calculator section of the Mathematics tests)
- Item flag/bookmark/highlighting
- Notepad (only available for ELA tests)
- Spell-Checker (on the grades 5 and 8 STE tests only)
- Highlighter tool

\* Must be selected ahead of time in the Student Enrollment/Personal Needs Profile (SR/PNP)

Students should participate in the TestNav8 **tutorial** and MCAS **practice tests** to become familiar with these tools and features prior to testing. These can be found at [mcas.pearsonsupport.com/student/](https://mcas.pearsonsupport.com/student/).

## Category Two: Assistive Technology Compatible with TestNav8

This category includes assistive technology used by the student that is not already built into in TestNav8, but is compatible with TestNav8 for MCAS testing and can run at the same time. **If the compatible assistive technology appears on the attached list, it means that it is compatible with TestNav8 for MCAS testing and can run concurrently.** The student will be able to access and use his or her AT software and/or hardware on the same computer on which the computer-based test is taken. The use of assistive technology must be listed in the student’s IEP or 504 plan as an accommodation.

Either “Assistive Technology” or “Screen Reader” must be selected in the student’s SR/PNP so an appropriate edition of the computer-based test can be made available to the student that allows activation of the compatible software or hardware (Refer to the “Designate in SR/PNP” column in the attached list of compatible assistive technology to determine if Screen Reader or Compatible Assistive Technology should be selected).

A list of compatible assistive technology software and hardware can be found on page 3 of this document. The Assistive Technology in the chart can be used with the TestNav app (recommended) using the operating system (OS) specified in the chart. If not using the app, you must use only the Firefox ESR 52 browser for secure testing.

Schools and districts should verify that the assistive technology shown on the attached list works as expected with TestNav8 prior to actual testing. This can be performed on the MCAS PearsonAccess<sup>next</sup> Training Site using the step-by-step directions found in the Quick Guide on page 8 of this document. School staff should conduct this check using the same device the student will use for testing.

## Category Three: “Stand-Alone” External Assistive Technology

A third category includes assistive technology that will *not* interact directly with TestNav8, and therefore must be accessed by the student using a separate computer station nearby. External assistive technologies do not need to be tested ahead of time, but may require an adult test administrator to assist the student with transition between the device used for external assistive technology and the computer used by the student for the computer-based test (or the paper-based test). All responses generated using a “stand-alone” assistive technology device must be transcribed verbatim by a test administrator to the student’s computer-based test or into the student’s test booklet/answer document.

External AT may only be used if the student has this listed as an accommodation in an IEP or 504 plan. Please contact the Department of Elementary and Secondary Education at [mcas@doe.mass.edu](mailto:mcas@doe.mass.edu) for consultation regarding whether a “stand-alone” AT device or program is allowable for MCAS testing.

Please note, the Compatible Assistive Technology SR/PNP field should **not** be selected if the student is using a “stand-alone” external assistive technology, since a special form of the test is not required for testing, but any other SR/PNP designation must be completed if the External AT device or program provides that specific accommodation (e.g. Speech-to-text or Word Prediction).

## Assistive Technology Software and Hardware Compatible with TestNav8 (Category Two)

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS	Designate in SR/PNP
VFO (Freedom Scientific)	JAWS	Screen Reader	Software	15, 16, 17, 18	Windows	Screen Reader
VFO (AbleNet Inc.)	AbleNet Wave Rollerball	Alternative Mouse / Pointing Device	Hardware	200-30300	PC, Mac	Assistive Technology
VFO (AbleNet Inc.)	BigBlu VisionBoard	Alternative Keyboard	Hardware	12000018	Windows, Chrome	Assistive Technology
VFO (AbleNet Inc.)	BigKeys Keyboard	Alternative Keyboard	Hardware	Various	PC, Mac	Assistive Technology
VFO (AbleNet Inc.)	BIGtrack Trackball	Alternative Mouse / Pointing Device	Hardware	Various	PC, Mac	Assistive Technology
VFO (AbleNet Inc.)	Blue2	Switch Access	Hardware	10000017	iOS, OSX, Windows, Chrome, Android	Assistive Technology
VFO (AbleNet Inc.)	Dwell Clicker 2	Alternative Mouse / Pointing Device	Software	n/a	Windows	Assistive Technology
VFO (AbleNet Inc.)	The Grid 2	Alternative Keyboard, Switch Access	Software	25000008	Windows	Assistive Technology
VFO (AbleNet Inc.)	The Grid 3	Alternative Keyboard, Switch Access	Software	25000043	Windows	Assistive Technology
VFO (AbleNet Inc.)	Intellikeys USB Keyboard	Alternative Keyboard	Software	139459		Assistive Technology
VFO (AbleNet Inc.)	IntelliKeys (with Overlay Maker 3.5)	Alternative Keyboard	Software	n/a	OSX, Windows	Assistive Technology

<b>Manufacturer</b>	<b>Product</b>	<b>Classification</b>	<b>Hardware / Software</b>	<b>Version</b>	<b>Compatible OS</b>	<b>Designate in SR/PNP</b>
VFO (AbleNet Inc.)	Hitch Computer Switch Interface	Switch Access	Hardware	10034100	Android, OS X, Windows	Assistive Technology
VFO (AbleNet Inc.)	Keys-U-See Wireless Combo Keyboard and Mouse	Alternative Keyboard, Alternative Mouse / Pointing Device	Hardware	10090401	Windows	Assistive Technology
VFO (AbleNet Inc.)	Kinderboard	Alternative Keyboard	Hardware	n/a	OSX, Windows, Android	Assistive Technology
VFO (AbleNet Inc.)	LessonBoard Keyboard	Alternative Keyboard	Hardware	12000029	OSX, Windows	Assistive Technology
VFO (AbleNet Inc.)	LearningBoard Keyboard	Alternative Keyboard	Hardware	12000028	OSX, Windows	Assistive Technology
VFO (AbleNet Inc.)	myGaze Assistive 2	AAC Device	Software	30000017	Windows	Assistive Technology
VFO (AbleNet Inc.)	TrackerPro	Alternative Mouse / Pointing Device	Hardware	12060100	Android, OSX, Windows	Assistive Technology
VFO (AbleNet Inc.)	VisionBoard Wireless Keyboard	Alternative Keyboard	Hardware	12000026	Windows, OSX	Assistive Technology
Ai Squared	Window-Eyes	Screen Reader	Software	9.2.1.0	Windows	Screen Reader
Ai Squared (GW Micro)	Window-Eyes (GW Micro)	Screen Reader	Software	7.2	Windows	Screen Reader
Ai Squared	ZoomText Mac	Text to Speech, Zoom/Magnification, Color and Font Customization	Software	1.2.0	OSX	Assistive Technology

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS	Designate in SR/PNP
Ai Squared	ZoomText Magnifier	Zoom/Magnification	Software	10.1	Windows	Assistive Technology
Ai Squared	ZoomText Magnifier/Reader	Screen Reader, Zoom/Magnification	Software	10.1	Windows	Assistive Technology
Ai Squared	ZoomText Fusion	Screen Reader, Zoom/Magnification	Software	10.1	Windows	Screen Reader (for ELA only)
Applied Human Factors	Reach Interface Author	Word Prediction, Alternative Keyboard	Software	v.6	Windows	Assistive Technology
AssistiveWare	SwitchXS	Switch Access	Software	Mac 2.5.4 & 2.5.1	OSX	Assistive Technology
Cambium Learning (Kurzweil)	Kurzweil 3000 Windows	Text to Speech, Word Prediction	Software	Version 13	Windows	Assistive Technology (text-to-speech for ELA only)
Don Johnston	Co:Writer	Word Prediction, Phonetic Spell Check	Software	v.7	Windows, OSX	Assistive Technology
Don Johnston	Co:Writer: Universal	Word Prediction, Speech-to-Text	Software	2.0.0	Windows, OSX, iOS <b>Note: Co:Writer Universal will not work with TN8 on Chrome browser or on Chromebooks</b>	Assistive Technology
Don Johnston	Switch Interface Pro	Switch Access	Hardware	v.6	Windows, OSX, Linux	Assistive Technology
DynaVox	Maestro	AAC Device	Software	n/a	Windows	Assistive Technology
DynaVox	Vmax+	AAC Device	Software	n/a	Windows	Assistive Technology
VFO (Freedom Scientific)	MAGic (with Speech)	Screen Reader, Zoom/Magnification	Software	v.12/v.13	Windows	Assistive Technology (text-to-speech for ELA only)
Google	ChromeVox	Screen Reader	Software	n/a	ChromeOS	

<b>Manufacturer</b>	<b>Product</b>	<b>Classification</b>	<b>Hardware / Software</b>	<b>Version</b>	<b>Compatible OS</b>	<b>Designate in SR/PNP</b>
Nuance Communications	Dragon Naturally Speaking	Speech-to-Text	Software	v.12/v.13	Windows	Assistive Technology
NV Access	NVDA	Screen Reader	Software	2014.3	Windows	Screen Reader
Origin Instruments	Headmouse Extreme	Alternative Mouse / Pointing Device	Hardware	n/a	Windows, OSX, iOS, Android, Linux	Assistive Technology
RJ Cooper & Assoc.	Cross Scanner	Switch Access	Hardware	n/a	Windows	Assistive Technology
TextHelp	Read&Write Gold for Mac	Text-to-Speech, Zoom/Magnification, Word Prediction, Speech-to-Text	Software	6	OSX	Assistive Technology (text-to-speech for ELA test only)
TextHelp	Read&Write Gold for Windows	Text-to-Speech, Zoom/Magnification, Word Prediction, Speech-to-Text	Software	11.5	Windows	Assistive Technology (text-to-speech for ELA only)
Traxsys	Touch Screen	Alternative Mouse / Pointing Device	Hardware	various	Any	Assistive Technology
Traxsys	Roller Plus Joystick	Alternative Mouse / Pointing Device	Hardware	n/a	Windows, OSX	Assistive Technology
Hims Inc	Braille Sense U2	Refreshable Braille Display	Hardware	Various	Any	Screen Reader
Humanware	Brailliant BI32	Refreshable Braille Display	Hardware	Various	Any	Screen Reader
Baum Inc	VarioUltra Braille display	Refreshable Braille Display	Hardware	Various	Any	Screen Reader
Humanware	BrailleNote Apex	Refreshable Braille Display	Hardware	Various	Any	Screen Reader
Mywe	Mywe Fast Typer	Word Prediction	Software	1.0.0	Windows Vista, XP, 7, 8	Assistive Technology
SumitSoft	Typing Assistant 2	Word Prediction	Software	8.2	Windows NT, 2000, XP, 2003, Vista, 7, 8, 10	Assistive Technology

## Quick Guide for Checking the Proper Operation of Compatible Assistive Technology (Category Two) Prior to Testing

The purpose of this guide is to provide schools the information needed to test whether a screen reader and other compatible assistive technology software and hardware will operate properly prior to actual MCAS testing. Only one grade and subject test is available on the **PearsonAccess<sup>next</sup> Training Site** on which to perform this check. It is recommended that this check be performed by school or district staff on the student's testing device, if possible.

### Step 1: Sign in to the MCAS PearsonAccess<sup>next</sup> Training Site

- Log in to the MCAS PearsonAccess<sup>next</sup> Training Site at <http://trng-mcas.pearsonaccessnext.com>
- Select the Spring 2017 MCAS Gr. 3–8 Administration from the dropdown in the top right hand corner.

**Note:** Updated practice tests will be available mid-January in the Spring 2018 MCAS Gr. 3–8 Administration of PearsonAccess Next.

### Step 2: Create a student and assign a test

- Click the **Setup** dropdown and select **Students**
- Select **Create / Edit Students, Register Students** and **Manage Student Tests** from the **Select Tasks** dropdown and click **Start**
- Populate the student's demographic information on the **Create / Edit Students** tab and click **Create**
- Select the **Register Students** tab at the top of the screen. Click the **Registered** checkbox, choose the **Student Grade**, and click **Save**.
- Select the **Manage Student Test** tab and populate all required fields. You must select either Grade 3 ELA or Grade 3 Math in the test dropdown; ensure that the test format is online; and add the appropriate accommodations. When finished, click **Create**. When you see the green "Success" notification, click **Exit Tasks** in the top right.
  - Note: The Screen-Reader version is only available for the Grade 3 Mathematics test; the Compatible Assistive Technology version is only available for the Grade 3 ELA test. Both accommodations will be available for all grades 3-8 in ELA and Mathematics tests during operational testing.

### Step 3: Create a test session and add students

- Click the **Testing** dropdown and select **Sessions**
- Select **Create / Edit Sessions** from the **Select Tasks** dropdown and click **Start**.
- Populate all required fields
  - Note: The Screen-Reader version is only available for the Grade 3 Mathematics test; the Assistive Technology version is only available for the Grade 3 ELA test. You must select the

correct test assigned for the accommodated form you plan to use with the student (i.e., Grade 3 Mathematics for Screen-Reader)

- In the **Students** box at the bottom, click in the box to select the student created in step 1. Click **Create**. Once you see the green “Success” message, click **Exit Tasks** at the top right.

#### **Step 4: Start the session and access student testing tickets**

- Select **Show Students in Sessions & Control Sessions** from the **Select Tasks** dropdown and select your session name on the left hand side of the screen.
- Click the **Prepare Session** button and then the **Start** button when it appears.
- Select **Student Testing Tickets** and **Seal Codes** from the **Resources** dropdown. These provide the username, password and four-digit seal code needed to log into TestNav.
  - **Note:** Seal codes will not be necessary for the Spring 2018 MCAS Gr. 3–8 Administration