

Guidelines for Using Assistive Technology as an MCAS Test Accommodation

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. These include:

- Text-to-speech, which reads the text aloud to a student using headphones, and highlights words as they are read (No other text-to-speech applications can be used for MCAS because of the associated risk of reading aloud the test items incorrectly)*
- Screen magnification
- Alternative background and font color*
- Answer masking*
- Line reader tool, which hides portions of the text
- Calculation device (on the calculator section of the Mathematics tests)
- Spell-checker (on the ELA tests, for students who have this “special access” accommodation listed in their IEP or 504 plan)*
- Item flag/bookmark/highlighting

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

Students should participate in the TestNav8 **tutorial** and MCAS **practice tests** so they will become familiar with these tools and features prior to testing. These can be found at <http://mcas.pearsonsupport.com/tutorial/>.

Category Two: Compatible Assistive Technology

This category includes assistive technology that is not included in TestNav8, but is **provided to the student by the school** for instructional purposes. If the assistive technology appears on the attached list, it means the AT is **compatible** with TestNav8 for MCAS testing. The student should be able to access and use the AT

software and hardware shown on the attached list on the same computer on which the computer-based test is taken.

The assistive technology must be listed in the student's IEP or 504 plan as an accommodation. "Assistive Technology" or "Screen Reader" must be selected in the student's SR/PNP so an edition of the computer-based test can be made available to the student that allows activation of the compatible software or hardware.

A list of compatible assistive technology software and hardware is attached.

Category Three: External "Stand-Alone" 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 for the assessment (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 the specific AT listed as an accommodation in their IEP or 504 plan which must be approved prior to MCAS testing by contacting the Department of Elementary and Secondary Education at mcas@doe.mass.edu.

The Assistive Technology field should **not** be selected if the student is using an external assistive technology, since a special form of the test is not required for testing. The specific AT application (e.g., word prediction) must be indicated, as appropriate, in the Student Registration/Personal Needs Profile (SR/PNP). As stated above, please note that **no external text-to-speech applications** may be used for MCAS testing because of the associated risk of incorrectly reading aloud the test items.

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

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS
VFO (Freedom Scientific)	JAWS	Screen Reader	Software	15	Windows
VFO (Freedom Scientific)	JAWS	Screen Reader	Software	16	Windows
VFO (Freedom Scientific)	JAWS	Screen Reader	Software	17	Windows
VFO (Freedom Scientific)	JAWS	Screen Reader	Software	18	Windows
VFO (AbleNet Inc.)	AbleNet Wave Rollerball	Alternative Mouse / Pointing Device	Hardware	200-30300	PC, Mac
VFO (AbleNet Inc.)	BigBlu VisionBoard	Alternative Keyboard	Hardware	12000018	Windows, Chrome
VFO (AbleNet Inc.)	BigKeys Keyboard	Alternative Keyboard	Hardware	Various	PC,Mac
VFO (AbleNet Inc.)	BIGtrack Trackball	Alternative Mouse / Pointing Device	Hardware	Various	PC,Mac
VFO (AbleNet Inc.)	Blue2	Switch Access	Hardware	10000017	iOS, OSX, Windows, Chrome, Android
VFO (AbleNet Inc.)	Dwell Clicker 2	Alternative Mouse / Pointing Device	Software	n/a	Windows
VFO (AbleNet Inc.)	The Grid 2	Alternative Keyboard, Switch Access	Software	25000008	Windows

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS
VFO (AbleNet Inc.)	The Grid 3	Alternative Keyboard, Switch Access	Software	2500043	Windows
VFO (AbleNet Inc.)	Intellikeys USB Keyboard	Alternative Keyboard	Software	139459	
VFO (AbleNet Inc.)	IntelliKeys (with Overlay Maker 3.5)	Alternative Keyboard	Software	n/a	OSX, Windows
VFO (AbleNet Inc.)	Hitch Computer Switch Interface	Switch Access	Hardware	10034100	Android, OS X, Windows
VFO (AbleNet Inc.)	Keys-U-See Wireless Combo Keyboard and Mouse	Alternative Keyboard, Alternative Mouse / Pointing Device	Hardware	10090401	Windows
VFO (AbleNet Inc.)	Kinderboard	Alternative Keyboard	Hardware	n/a	OSX, Windows
VFO (AbleNet Inc.)	LessonBoard Keyboard	Alternative Keyboard	Hardware	12000029	OSX, Windows
VFO (AbleNet Inc.)	LearningBoard Keyboard	Alternative Keyboard	Hardware	12000028	OSX, Windows
VFO (AbleNet Inc.)	myGaze Assistive 2	AAC Device	Software	30000017	Windows
VFO (AbleNet Inc.)	TrackerPro	Alternative Mouse / Pointing Device	Hardware	12060100	Android, OSX, Windows
VFO (AbleNet Inc.)	VisionBoard Wireless Keyboard	Alternative Keyboard	Hardware	12000026	Windows, OSX
Ai Squared	Window-Eyes	Screen Reader	Software	9.2.1.0	Windows

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS
Ai Squared (GW Micro)	Window-Eyes (GW Micro)	Screen Reader	Software	7.2	Windows
Ai Squared	ZoomText Mac	Text to Speech, Zoom/Magnification, Color and Font Customization	Software	1.2.0	OSX
Ai Squared	ZoomText Magnifier	Zoom/Magnification	Software	10.1	Windows
Ai Squared	ZoomText Magnifier/Reader	Screen Reader, Zoom/Magnification	Software	10.1	Windows
Ai Squared	ZoomText Fusion	Screen Reader, Zoom/Magnification	Software	10.1	Windows
Applied Human Factors	Reach Interface Author	Screen Reader, Word Prediction, Alternative Keyboard	Software	v.6	Windows
AssistiveWare	SwitchXS	Switch Access	Software	Mac 2.5.4 & 2.5.1	OSX
Cambium Learning (Kurzweil)	Kurzweil 3000 Windows	Text to Speech, Word Prediction	Kurzweil 3000 Windows is not supported for MCAS testing		
Don Johnston	Co:Writer	Word Prediction, Phonetic Spell Check	Software	v.7	Windows, OSX
Don Johnston	Read:OutLoud	Text-to-Speech	Read:OutLoud is not supported for MCAS testing		

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS
Don Johnston	Switch Interface Pro	Switch Access	Hardware	v.6	Windows, OSX, Linux
DynaVox	Maestro	AAC Device	Software	n/a	
DynaVox	Vmax+	AAC Device	Software	n/a	
VFO (Freedom Scientific)	MAGic (with Speech)	Screen Reader, Zoom/Magnification	Software	v.12/v.13	Windows
VFO (Freedom Scientific)	WYNN	Text to Audio Conversion, Phonetic Spell Check	WYNN is not supported for MCAS testing		
GoQ Software (Quillsoft)	WordQ 4 (Mac)	Word Prediction, Text-to-Speech	WordQ 4 (Mac) is not supported for MCAS testing		
GoQ Software (Quillsoft)	wordQ + speakQ	Word Prediction, Text-to-Speech, Speech-to-Text, Phonetic Spell Check	wordQ + speakQ is not supported for MCAS testing		
Nuance Communications	Dragon Naturally Speaking	Speech-to-Text	Software	v.12/v.13	Windows
NV Access	NVDA	Screen Reader	Software	2014.3	Windows
Origin Instruments	Headmouse Extreme	Alternative Mouse / Pointing Device	Hardware	n/a	Windows, OSX, iOS, Android, Linux
RJ Cooper & Assoc.	Cross Scanner	Switch Access	Hardware	n/a	Windows
TextHelp	Read&Write Gold for Mac	Screen Reader, Zoom/Magnification, Word Prediction	Read&Write Gold for Mac is not supported for MCAS testing		
TextHelp	Read&Write For Windows	Screen Reader, Zoom/Magnification, Word Prediction	Read&Write For Windows is not supported for MCAS testing		
Traxsys	Touch Screen	Alternative Mouse / Pointing Device	Hardware	various	Any

Manufacturer	Product	Classification	Hardware / Software	Version	Compatible OS
Traxsys	Roller Plus Joystick	Alternative Mouse / Pointing Device	Hardware	n/a	Windows, OSX
Hims Inc	Braille Sense U2	Refreshable Braille Display	Hardware	Various	Any
Humanware	Brailliant BI32	Refreshable Braille Display	Hardware	Various	Any
Baum Inc	VarioUltra Braille display	Refreshable Braille Display	Hardware	Various	Any
Humanware	BrailleNote Apex	Refreshable Braille Display	Hardware	Various	Any