

# 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. Pearson has conducted internal quality control to evaluate how well some of the common assistive technologies interact with the TestNav app. AT can be sorted into four 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., AT provided to the student by the school) that is **compatible** with the testing platform and can be used on the same computer used for computer-based testing.
3. AT that **may be compatible** with TestNav8, but must be tested by the school prior to MCAS testing to confirm that the technology is compatible.
4. AT that **cannot** work with TestNav8, and therefore must be used on a **separate device** at an adjacent computer station during testing.

AT devices, applications, and adaptive hardware may be used for MCAS testing only by students who have this listed as an accommodation in an IEP or 504 plan.

**NOTE:** Many assistive technology devices rely on Internet browser support to fully function. However, in fall 2018, Mozilla ended its support for the Java plugin for Firefox ESR, which is required for secure testing using a web-based browser on the student's computer. Since support for browser-based AT is no longer available, all MCAS testing must now be completed using the TestNav application (app), which may or may not work correctly with the student's AT device or program. Therefore, many AT devices must be tested by the school before testing begins using the computer that will be used by the student during testing. See Category 3 below for an explanation of the AT testing procedure that schools should follow to test a student's AT device.

## Category One: Assistive Technology already included in TestNav8

Many universal accessibility features and accommodations are embedded within the TestNav8 testing platform that can be used by any student taking the computer-based test. Some features must be selected in advance in the Student Registration/Personal Needs Profile (SR/PNP) in the MCAS PearsonAccess<sup>next</sup>, while others are automatically available to all students.

### Accommodations that must be selected in advance in the Student Registration/Personal Needs Profile (SR/PNP):

- 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)\*
- Calculator (for use on the non-calculator session of the Mathematics test, and intended for use by students who have this "special access" accommodation listed in their IEP or 504 plan)\*

**Accessibility 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 session 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 Registration/Personal Needs Profile (SR/PNP)

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

**Category Two: Assistive Technology Already Confirmed as Compatible with TestNav8**

This category includes assistive technology used by the student that is not built into TestNav8, but is compatible with TestNav8 for MCAS testing and can run at the same time. **If the assistive technology appears on the list below, its compatibility has been confirmed for MCAS testing with TestNav8 and can run concurrently on the same device.**

<b>Assistive Technology</b>	<b>Expected user experience notes</b>
Jaws 18, 2018, 2019 (screen reader)	Students able to use as expected.
NVDA 2019 (screen reader)	Students are unable to change user settings in NVDA once form is loaded but user experience is expected to be positive.
Dragon Professional 14 (Speech-to-text)	Students able to use as expected.
Zoom Text 2018 (screen magnification)	Student can use pre-set features during testing. Students cannot make adjustments during testing with the exception of magnification levels that can be increased using keyboard commands.
Hardware based technology (special equipment used with the computer, such as alternate keyboards or a special mouse)	Assistive devices that are hardware based should work with the TestNav app.

The use of assistive technology must be listed in the student’s IEP or 504 plan as an accommodation.

“Compatible Assistive Technology” or “Screen Reader” must be selected, as appropriate, in the student’s **SR/PNP** so the correct accommodated test edition of the computer-based test can be made available to the student that allows activation of the compatible software or hardware.

## Category Three: Assistive Technology that may be compatible with TestNav8, but must be tested by the school to determine its compatibility

This category includes assistive technology used by the student that is not listed in the table above, but *may* be compatible with TestNav8 for MCAS testing. Schools and districts must verify that the assistive technology works as expected with TestNav8 prior to actual testing.

The process for determining whether a specific AT program is compatible can be performed on the MCAS PearsonAccess<sup>next</sup> Training Site using the step-by-step directions in Appendix A. School staff should conduct this check using the same device the student will use for testing.

Once the application is tested and found to be *compatible*, 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. See Category Two for instructions.

If the technology is tested and found to be *incompatible*, see Category Four below for instructions on using the technology on a separate computer station.

**To test for compatibility, see Appendix A: Guide for Checking the Proper Operation of Compatible Assistive Technology Prior to Testing.**

## Category Four: Assistive Technology Confirmed as Requiring a Separate Computer Station for use with TestNav8

A fourth category includes assistive technologies that **cannot** interact directly with TestNav8, and therefore must be accessed by the student using a separate **external (i.e., stand-alone) computer station**. In this case, an adult test administrator must assist the student to transition between the external device used for the student's AT and the computer used by the student for the computer-based (or, if applicable, paper-based) test. All responses generated using an external assistive technology device must be transcribed verbatim by a test administrator (or the student) onto the student's computer-based test or into the student's test booklet/answer document.

**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 and for specific test administration instructions**, as some AT programs may either change the testing construct or allow a student to access the internet, and would therefore be prohibited on the MCAS test.

Please note that the "Compatible Assistive Technology" field should **not** be selected in the SR/PNP if the student is using a "stand-alone" external assistive technology, since a special form of the test is not required. Other **compatible** AT applications will require pre-selection in the SR/PNP so the "Compatible Assistive Technology" form of the test will be provided to the student.

Programs that have been tested and confirmed as **unable to interact directly** with TestNav8 and therefore will require a stand-alone external computer station, are listed below:

<b>Assistive Technology</b>	<b>Expected user experience notes</b>
Chrome and other web extensions	Browser extensions will not work with the TestNav application at this time <sup>1</sup> .
Read&Write 11.5 and 12	Students cannot access toolbar or any preset features.
Co:Writer Universal	Student cannot access the word prediction window or any preset features.

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<sup>1</sup> No web extensions are allowable for spring 2020 test administration. Development is underway to allow limited use of select web extensions in future test administrations.

## APPENDIX A

### Guide for Checking the Proper Operation of Compatible Assistive Technology Prior to MCAS Testing

THE INFORMATION BELOW WILL GUIDE SCHOOLS IN DETERMINING WHETHER AN ASSISTIVE TECHNOLOGY APPLICATION AND/OR HARDWARE WILL OPERATE CONCURRENTLY WITH TESTNAV8. ONE GRADE LEVEL 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 THE SCHOOL OR DISTRICT ON THE STUDENT'S TESTING DEVICE, IF POSSIBLE.

**Step 1: Download the TestNav8 app to the student's computer.** The TestNav app downloads can be found at various app stores or at <https://download.testnav.com/#>.

**Step 2: 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 2020 MCAS Gr. 3–8 Administration from the dropdown in the top right-hand corner.

**Step 3: "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 4: 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 5: 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** from the **Resources** dropdown. These provide the username and password needed to log into TestNav.

**Step 6: Log into the practice test from Students device.**

- Use the Student Testing Ticket to log into the practice test.
- Practice using the AT technology to determine if it works as expected within the TestNav app.