

VI
Visual Impairment

M-STEP Guide for Teachers of Students Who Have a Visual Impairment (VI)

Everything (or almost everything) Teachers of
Students Who have a Visual Impairment
Need to Know About M-STEP

- **Overview**
- **Assessment Structure**
- **Universal Tools, Designated Supports, and Accommodations**
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Overview

This guide addresses some of the major questions teachers might have related to the kinds of Universal Tools, Designated Supports, and Accommodations that are allowable

for students on the M-STEP assessments.

Note: Much of the information in this document can be found in the [Supports and Accommodations Guidance Document](#).

Assessment Structure

The M-STEP is composed of the following content areas and language domains in the corresponding grade levels:

Mathematics – Grades 3-7: Reading is required to answer a variety of question types which include graphs, diagrams, charts.

English language arts (ELA) – Grades 3-7: Reading is required to answer a variety of question types. Typing (or writing) is required to answer some constructed response questions. Listening is required to answer content provided via audio.

Science – Grades 5, 8, 11: Reading is required to answer a variety of question types which include using diagrams, charts, and photographs.

Social Studies – Grades 5, 8, 11: Reading is required to answer a variety of question types include using diagrams, charts, maps, and photographs.

The default mode for testing is online. However, a student may take the paper/pencil form of the assessment if necessary.

Universal Tools, Designated Supports, and Accommodations

Test Timing

The M-STEP assessments are untimed. Students can take the time they need to complete the test, as long as that time falls within the appropriate testing window. Refer to the [M-STEP Important Dates](#) document for more information about the testing windows.

Color Options

Color Choice: This option, available for students taking the online test, provides multiple background colors for on-screen text. Students with attention difficulties might need this support for viewing test content online. It might also be needed by some students with visual impairments or other print disabilities

(including learning disabilities). The decision to utilize the color selection option for a student should be informed by evidence that color selections meet the student's needs. This feature must be enabled by the testing coordinator for student use during testing. The color options can be viewed in the Online Tools Training (OTTs), which are discussed later in this document.

Contrasting Color: The contrasting text color option gives multiple background colors along with the contrasting text color options for the online test screen. This feature must be enabled by the testing coordinator for students to use during testing. The color options can be viewed in the Online Tools Training (OTTs), which are discussed later in this document.

Color Overlay: Students taking the paper/pencil or the online form of the assessment are free to use a color overlay that they normally use.

Masking

Masking involves blocking content on the screen that the student does not immediately need to answer the question or that may be distracting to the student. With masking, students are better able to focus their attention on a specific part of a test item during the assessment. In the online testing system, students must have this feature enabled for them by the testing coordinator; students who are taking the paper/pencil form of the assessment may use whatever tools they normally use for the purposes of masking.

Magnification

Magnifier: All students taking the online M-STEP assessments have access to an embedded online magnifier. This Universal Tool provides students with an option to magnify an area of the screen by one or two times magnification. Use of the magnifier tool is controlled by the student, who will have to re-select it for every test question they want to use it on. Students must be comfortable navigating the screen once the magnification option is selected. Frequent use of this tool could result in the student needing additional overall time to complete the assessment.

Continuous Magnification: This option is for students testing online and must be enabled by the test coordinator. It defaults the screen content to the two-times magnification option once the assessment begins. This tool does not require the student to re-select the magnifier on each screen.

Other Specialized Magnification Devices/ Visual Aids: Students may use whatever specialized magnification tools or visual aids they regularly use in the classroom to take the paper/pencil assessment.

Computer-Based Magnification Software:

To ensure that test scores are valid and meaningful for educators, the Michigan Department of Education (MDE) is required to maintain strict security procedures related to the administration of the tests. For online tests, this requires that a secure browser be used for testing, so that students are not able to access information or software that could be used for cheating purposes. M-STEP's secure browser locks down the device on which the student is testing so that the student is only able to access the test. Unfortunately, because of the need to secure the tests, this limits the use of third-party software systems that students may be using in their class work. Some of these systems may still function with the testing engine, but educators should test this in advance of the students actually sitting down to take the test.

Enlarged Print

An enlarged print paper test booklet can be ordered for students. The M-STEP enlarged print assessments are produced in 15-point font on 11 x 15 inch paper. This test can be used along with any specialized magnification devices the student may currently be using.

Braille

Students have the option to use a braille form of the assessment. MDE produces the M-STEP assessments in UEB and Nemeth within UEB when required. MDE also produces an uncontracted form of the assessment for students who are still in the process of learning braille.

When an M-STEP braille test is ordered for a student, the district will be shipped a Braille Kit, which will include the Assessment Administrator Booklet for Braille (AABB). The AABB provides the test administrator with a script and a guide to be used if the student needs the test administrator to read aloud test content to them.

Using Enlarged Print with a Braille Kit

Some students might benefit from using an Enlarged Print test booklet in addition to a braille booklet. This may be needed for students who are still in the process of learning braille. Educators should note that due to the nature of the braille process, students may see slight differences between the enlarged print and the braille test booklet. These differences are explained in the AABB, the document that comes with the Braille Kit. Educators who have students who may need both sets of materials must contact MDE for availability of this option for the school year, by sending an e-mail to mde-oeaa@michigan.gov. Availability of this option may vary from year to year.

Text-to-Speech

There are two types of text-to-speech (TTS) options for students taking the online M-STEP assessments. Both options provide a synthesized voice for students. Not all students who have visual needs will benefit from using this type of support. Some students may need to have an in-person human reader if the synthesized voice of the TTS is distracting for them or provides a negative experience. For these situations, please see the section of this document related to using in-person human readers.

The two different text-to-speech options that can be enabled by your district's test coordinator are:

- **Text-to-Speech (TTS)**
 - Available for M-STEP mathematics, science, social studies, and English language arts; available for students at all assessed grade levels
 - Reads aloud the test questions, passage-based writing readings, and answer options
 - Students can replay the audio as many times as they would like

- **Text-to-Speech Passage (TTS Passage) – Accommodation**
 - Available for M-STEP English language arts, only for students in grades 6-7 whose IEP or Section 504 plan indicates this need
 - Reads aloud the test questions, passage-based writing readings, answer options, and reading passages
 - Students can replay the audio as many times as they would like

In-Person Human Reader

An in-person human reader can be used for any of the content areas. However, there are some differences between such use for the paper/pencil test and for the online test.

An in-person human reader can be used with students who may:

- strongly need to have the test administered by someone with whom they are familiar (that is, their daily instructor)
- have a difficult time understanding the synthesized voice produced by the online system's text-to-speech

An in-person human reader can be used in the following ways for the M-STEP:

- **Mathematics:** Can be used with online or paper/pencil testing; must be administered in a one-on-one setting; the Read-Aloud Guidelines in the [Supports and Accommodations Guidance Document](#) must be used
- **ELA:** Can be used with online or paper/pencil testing; must be administered in a one-on-one setting; the Read-Aloud Guidelines in the [Supports and Accommodations Guidance Document](#) must be used
- **Science and Social Studies:** Can be used as a support only for the paper/

pencil testing; the reader must use the Reader Script, which is only available for the paper/pencil test (if you are administering the M-STEP assessment and you do not have the Reader Script, obtain it from your Building or District M-STEP Coordinator); the assessment can be administered to an individual student or in a small group of no more than 5 students of the same grade level and content area

- If the student is taking the braille form of the assessments, the test administrator will use the AABB—discussed in the Braille section of this document—instead of the Reader Script or the Read-Aloud Guidelines.

HotKeys/Keyboard Shortcuts

A list of hotkeys/keyboard shortcuts is available at this [DRC's INSIGHT Portal](#).

Tips for Readers: To Monotone or Not to Monotone

The Read-Aloud Guidelines found in the [Supports and Accommodations Guidance Document](#) say readers should “strive to communicate in a neutral tone and maintain a neutral facial expression and posture.” This does not mean that readers have to read in a monotone voice without any inflection. It does mean that readers should not overexaggerate words/phrases/sentences/punctuation in a manner that would provide an unnecessary emphasis on any part of the test.

Similarly, the Guidelines say that readers should “avoid gestures, head movements, or any verbal or non-verbal emphasis on words not otherwise emphasized in text.” Again, the point of this guidance is to ensure that readers are not exaggerating movements that might give away answers. Remember that the tests are designed to show what the student knows, not what the reader knows.

Trying Out the Online Universal Tools, Designated Supports, and Accommodations

The only way that you and students can determine if a tool meets their needs is to have them try out the tools. You can try out all of the online Universal Tools, Designated

Supports, and Accommodations by following the directions to access the Online Tools Trainings (OTTs) at [this link](#).

Individualized Needs

Because of the very individualized needs of many of your students, you may come across a scenario that doesn't fit neatly into the areas described in this document. When those situations arise, contact Jen Paul at the Michigan Department of Education for help in determining what might work best. Send an e-mail to mde-oeaa@michigan.gov with your question or to set up a time to talk.

The [M-STEP website](#) provides additional helpful resources for educators. Consult your District's Assessment Coordinator for further information and resources. If you feel the district coordinator is not adequately addressing all aspects of the M-STEP test – including making sure your students' needs are being met during testing – become your own advocate for your students.