CAASPP and ELPAC Accessibility Guide for Online Testing

- CAASPP Summative Assessments
- CAASPP Interim Assessments
- ELPAC Summative Assessment

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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACI</td>
<td>alternative computer input</td>
</tr>
<tr>
<td>AIR</td>
<td>American Institutes for Research</td>
</tr>
<tr>
<td>ASL</td>
<td>American Sign Language</td>
</tr>
<tr>
<td>BRF</td>
<td>braille-ready format</td>
</tr>
<tr>
<td>CAA</td>
<td>California Alternate Assessment</td>
</tr>
<tr>
<td>CAASPP</td>
<td>California Assessment of Student Performance and Progress</td>
</tr>
<tr>
<td>CALPADS</td>
<td>California Longitudinal Pupil Achievement Data System</td>
</tr>
<tr>
<td>CalTAC</td>
<td>California Technical Assistance Center</td>
</tr>
<tr>
<td>CAST</td>
<td>California Science Test</td>
</tr>
<tr>
<td>CAT</td>
<td>computer adaptive test</td>
</tr>
<tr>
<td>CDE</td>
<td>California Department of Education</td>
</tr>
<tr>
<td>CSA</td>
<td>California Spanish Assessment</td>
</tr>
<tr>
<td>DBT</td>
<td>Duxbury Braille Translator</td>
</tr>
<tr>
<td>DIA</td>
<td>designated interface assistant</td>
</tr>
<tr>
<td>DIP</td>
<td>dual in-line package</td>
</tr>
<tr>
<td>EBAE</td>
<td>English Braille American Edition</td>
</tr>
<tr>
<td>EL</td>
<td>English learner</td>
</tr>
<tr>
<td>ELA</td>
<td>English language arts/literacy</td>
</tr>
<tr>
<td>ELP</td>
<td>English language proficiency</td>
</tr>
<tr>
<td>ELPAC</td>
<td>English Language Proficiency Assessments for California</td>
</tr>
<tr>
<td>HAT</td>
<td>hybrid adaptive test</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
</tr>
<tr>
<td>IEP</td>
<td>individualized education program</td>
</tr>
<tr>
<td>JAWS</td>
<td>Job Access With Speech®</td>
</tr>
<tr>
<td>LEA</td>
<td>local educational agency</td>
</tr>
<tr>
<td>PRN</td>
<td>printer output file</td>
</tr>
<tr>
<td>PPT</td>
<td>paper-pencil test</td>
</tr>
<tr>
<td>PT</td>
<td>performance task</td>
</tr>
<tr>
<td>RBD</td>
<td>Refreshable Braille Display</td>
</tr>
<tr>
<td>SSID</td>
<td>Statewide Student Identifier</td>
</tr>
<tr>
<td>TDS</td>
<td>test delivery system</td>
</tr>
<tr>
<td>TOMS</td>
<td>Test Operations and Management System</td>
</tr>
<tr>
<td>UAAG</td>
<td>Smarter Balanced Usability, Accessibility, and Accommodations Guidelines</td>
</tr>
<tr>
<td>UEB</td>
<td>Unified English Braille</td>
</tr>
</tbody>
</table>
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Chapter 1. Introduction
Manual Content

This manual provides information for local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) coordinators, LEA English Language Proficiency Assessments for California (ELPAC) coordinators, CAASPP test site coordinators, site ELPAC coordinators, test administrators, and test examiners about universal tools, designated supports, accommodations, and test settings used in the following California assessments:

- Smarter Balanced for English Language Arts/Literacy (ELA)
- Smarter Balanced for Mathematics
- California Alternate Assessment (CAA) for ELA
- CAA for Mathematics
- CAA for Science
- California Science Test (CAST)
- California Spanish Assessment (CSA)
- Summative ELPAC

Information provided includes descriptions of accessibility resources and test settings, configuration information, how to create test sessions, and how to configure and administer tests to students with visual impairment.

What’s New in 2019–2020

General or All

- “Medical Supports” is the new name for the “Medical Device” non-embedded designated support for all assessments. The use of medical supports allows for access to any type of support a student needs beyond a medical device.
- Universal tools, designated supports, and accommodations are available for the computer-based Summative ELPAC.

Smarter Balanced

- Illustration glossaries for mathematics items are available for selected construct-irrelevant terms. This resource, which is a type of translation glossary, is available as an embedded designated support for online assessments and as a non-embedded designated support for paper-pencil tests. (Note that selecting this embedded designated support will result in a fixed-form online assessment for the 2019–2020 administration.)
- Somali and Hmong are now offered as a translation glossary for mathematics items.
- Unified English Braille Technical is available for the mathematics assessment.
CAST
Translated test directions are available in Mixteco.

Summative ELPAC

Online for Kindergarten Through Grade Twelve

- The following accessibility resources can be assigned to the computer-based Summative ELPAC. Universal tools marked with a single asterisk (*) are available for grades three through twelve only. The universal tool marked with two asterisks (**) is not needed for kindergarten and grade one due to one-on-one administration.

<table>
<thead>
<tr>
<th>Type</th>
<th>Universal Tools</th>
<th>Designated Supports</th>
<th>Accommodations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded</td>
<td>- Breaks&lt;br&gt;- Digital notepad&lt;br&gt;- Expandable items&lt;br&gt;- Expandable passages&lt;br&gt;- Highlighter&lt;br&gt;- Keyboard navigation&lt;br&gt;- Line reader*&lt;br&gt;- Mark for review**&lt;br&gt;- Strikethrough*&lt;br&gt;- Writing tools*&lt;br&gt;- Zoom</td>
<td>- Color contrast&lt;br&gt;- Masking&lt;br&gt;- Mouse pointer&lt;br&gt;- Pause or replay audio (Listening)&lt;br&gt;- Pause or replay audio (Speaking)&lt;br&gt;- Permissive mode&lt;br&gt;- Print size&lt;br&gt;- Streamline&lt;br&gt;- Turn off any universal tool(s)</td>
<td>- American Sign Language&lt;br&gt;- Audio transcript&lt;br&gt;- Braille (Embossed and Refreshable)&lt;br&gt;- Closed-captioning&lt;br&gt;- Text-to-speech (Listening, Speaking, Writing)</td>
</tr>
</tbody>
</table>
## Computer-based Summative ELPAC accessibility resources (continuation)

<table>
<thead>
<tr>
<th>Type</th>
<th>Universal Tools</th>
<th>Designated Supports</th>
<th>Accommodations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-embedded</td>
<td>• Breaks</td>
<td>• American Sign Language or Manually Coded English (test directions)</td>
<td>• Alternate response options</td>
</tr>
<tr>
<td></td>
<td>• Oral clarification of test</td>
<td>• Amplification</td>
<td>• American Sign Language or Manually Coded English</td>
</tr>
<tr>
<td></td>
<td>directions in English</td>
<td>• Color contrast</td>
<td>• Scribe</td>
</tr>
<tr>
<td></td>
<td>• Scratch paper</td>
<td>• Color overlay</td>
<td>• Speech-to-text</td>
</tr>
<tr>
<td></td>
<td>• Test navigation assistant</td>
<td>• Designated interface assistant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Magnification</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Masking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Medical supports</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Noise buffers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Print on demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Read aloud (for items; Writing)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Separate setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Simplified test directions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Translated test directions</td>
<td></td>
</tr>
</tbody>
</table>
Paper for Kindergarten Through Grade Two Writing

- The computer-based ELPAC includes paper-pencil assessments in the Writing domain for students in kindergarten through grade two. The following non-embedded accessibility resources can be assigned to students, as needed:

<table>
<thead>
<tr>
<th>Universal Tools</th>
<th>Designated Supports</th>
<th>Accommodations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaks</td>
<td>American Sign Language or Manually Coded English (test directions)</td>
<td>Alternate response options</td>
</tr>
<tr>
<td>Highlighter</td>
<td>Amplification</td>
<td>American Sign Language or Manually Coded English (for presentation of test questions and student responses to questions)</td>
</tr>
<tr>
<td>Mark for review</td>
<td>Color overlay</td>
<td>Braille</td>
</tr>
<tr>
<td>Oral clarification of test directions by the test examiner in English</td>
<td>Magnification</td>
<td>Breaks</td>
</tr>
<tr>
<td>Scratch paper</td>
<td>Masking</td>
<td>Large print</td>
</tr>
<tr>
<td></td>
<td>Medical supports</td>
<td>Scribe</td>
</tr>
<tr>
<td></td>
<td>Noise buffers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read aloud for items</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separate setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Simplified test directions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Translated test directions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>American Sign Language or Manually Coded English (test directions)</td>
<td></td>
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</table>
Sections

This manual contains the following sections:

- **Chapter 1, Introduction** (this section), describes this guide.
- **Chapter 2, Accessibility Features for CAASPP and ELPAC Assessments**, provides information about the types of universal tools, designated supports, and accommodations available for CAASPP and ELPAC testing.
- **Chapter 3, Configuring Selected System and Third-Party Accessibility Resources**, describes how to configure tools in the operating system and third-party applications for use with the secure browser.
- **Chapter 4, Testing Students with Accessibility Resources**, describes how to verify students were assigned the correct designated supports and accommodations and how to approve students for testing with these resources, including braille. *This chapter will be available in late fall 2019.*
- **Chapter 5, Requirements for Testing Students with Visual Impairment**, describes how to configure embossing software and how to configure and use Job Access With Speech ® for testing.
- **Chapter 6, Appendices**, provides information about how LEA CAASPP coordinators can acquire Help Desk support, as well as a change log of recently made updates to the manual.
Document Conventions

Table 1 lists key symbols and typographical conventions used in this manual.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Alert" /></td>
<td><strong>Alert:</strong> This symbol accompanies important information regarding a task where failure to adhere to the instructions or information may cause minor errors.</td>
</tr>
<tr>
<td><img src="image" alt="Note" /></td>
<td><strong>Note:</strong> This symbol accompanies additional information that may be of interest.</td>
</tr>
<tr>
<td><img src="image" alt="Policy" /></td>
<td><strong>Policy:</strong> This symbol accompanies information that is based on policy set by the California Department of Education.</td>
</tr>
<tr>
<td><img src="image" alt="Advisory" /></td>
<td><strong>Advisory:</strong> This symbol accompanies information that is advisory.</td>
</tr>
<tr>
<td><img src="image" alt="Tip" /></td>
<td><img src="image" alt="text" /> Text in brackets is used to indicate a link, button, or tab that is selectable.</td>
</tr>
<tr>
<td><img src="image" alt="Tip" /></td>
<td><strong>Tip:</strong> This symbol accompanies suggestions that may be useful.</td>
</tr>
<tr>
<td><img src="image" alt="Warning" /></td>
<td><strong>Warning:</strong> This symbol accompanies important information regarding actions that may cause fatal errors.</td>
</tr>
<tr>
<td><img src="image" alt="Resources" /></td>
<td><strong>Resources:</strong> This symbol accompanies links to supporting documentation and instructions.</td>
</tr>
</tbody>
</table>
Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC
Types of Resources

Resources in This Section:

- **CAASPP Smarter Balanced Accessibility Resources** documents—linked on the CDE Smarter Balanced Accessibility Resources web page at [https://www.cde.ca.gov/ta/tg/ca/sbaccessibilityres.asp](https://www.cde.ca.gov/ta/tg/ca/sbaccessibilityres.asp)
- California Department of Education (CDE) Matrix Four—linked on the English Language Proficiency Assessments for California (ELPAC) web page—[https://www.cde.ca.gov/ta/tg/ep/](https://www.cde.ca.gov/ta/tg/ep/)
- Embedded Universal Tools, Designated Supports, and Accommodations Video Tutorials web page—[http://www.caaspp.org/training/caaspp/uaag.html](http://www.caaspp.org/training/caaspp/uaag.html)
- **Smarter Balanced Resources and Practices Comparison Crosswalk**—linked on the CDE Smarter Balanced Accessibility Resources web page at [https://www.cde.ca.gov/ta/tg/ca/sbaccessibilityres.asp](https://www.cde.ca.gov/ta/tg/ca/sbaccessibilityres.asp)

Available Assessments

**CAASPP**

The CAASPP provides required assessments in English language arts/literacy (ELA), mathematics, and science that permit students to demonstrate their mastery of the Common Core State Standards and the California Next Generation Science Standards; an optional assessment, the California Spanish Assessment (CSA), measures a student’s competency in Spanish language arts.

Assessments are made accessible through a variety of universal tools, designated supports, and accommodations. Students whose individualized education program (IEP) teams designate the use of an alternate assessment take the California Alternate Assessments (CAAs).
To help identify similarities between the assessment resources and classroom practices, Smarter Balanced has developed a Resources and Practices Comparison Crosswalk. The Crosswalk lists the resources that are currently included in the UAAG and assists educators and decision-makers by providing a description of both the resource and its classroom equivalent.

**Summative ELPAC**

The Summative ELPAC is the mandated state test for determining English language proficiency (ELP). It must be given annually to students who have been identified as English learners. California and federal law require that local educational agencies administer a state test of ELP to eligible students in kindergarten through grade twelve. The ELPAC is aligned with the 2012 California English Language Development Standards.

The 2019–2020 administration marks the first year the Summative ELPAC is offered as a computer-based assessment. The Initial ELPAC, which serves as the primary identification of students as English learners, will be computer-based for its 2020–2021 administration.

Existing CAASPP accessibility resources contributed to the development of an ELPAC accessibility framework specific for this population. This approach ensures all students have the opportunity to show what they know and what they can do in English. Resources that were appropriate for the construct were considered, as well as new resources that are specific to the needs of the diverse students taking the ELPAC.

**Available Accessibility Resources**

The summative assessments and practice and training tests contain universal tools, designated supports, and accommodations. Embedded resources are those that are part of the online test administration system, whereas non-embedded resources are provided outside of that system.

The accessibility resources in this guide identified as a universal tool, designated support, or accommodation are available for the listed, approved assessments and do not change the construct of what is being assessed. Students who receive these accessibility resources will receive a valid score.

The following accessibility resources and test settings for CAASPP and ELPAC online testing are described in the next sections. Note that usage and description information is adapted from the Smarter Balanced Usability, Accessibility, and Accommodations Guidelines. Note also that samples provided are screen captures made using the Smarter Balanced practice tests.
Accessibility Features for the CAASPP and Summative ELPAC

Types of Resources

**Universal Tools**

**Embedded**

Select a resource link to access its description. In the embedded universal tools table, “Y” indicates that the resource is available during testing and “N” indicates that the resource is not available during testing.

<table>
<thead>
<tr>
<th>Embedded Universal Tool</th>
<th>CAA ELA</th>
<th>CAA Math</th>
<th>CAA Science</th>
<th>ELA</th>
<th>ELPAC</th>
<th>ELPAC (K–2 W)</th>
<th>Mathematics</th>
<th>CSA</th>
<th>CAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaks</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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Non-Embedded

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## Designated Supports

### Embedded

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Non-Embedded Designated Support | CAA ELA | CAA Math | CAA Science | ELA | ELPAC | ELPAC (K–2 W) | Mathematics | CSA | CAST
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
100s Number Table, Science | N | N | Y | N | N | N | N | N | Y
American Sign Language or Manually Coded English (test directions) | N | N | N | N | Y | N | N | N | N
Amplification | Y | Y | Y | Y | Y | Y | Y | Y | Y
Bilingual Dictionary | N | N | N | Y | N | N | N | N | N
Calculator, Science | N | N | N | N | N | N | N | N | Y
Color Contrast | Y | Y | Y | Y | Y | N | Y | Y | Y
Color Overlay | Y | Y | Y | Y | Y | Y | Y | Y | Y
Designated Interface Assistant | N | N | N | N | Y | N | N | N | N
Magnification | Y | Y | Y | Y | Y | Y | Y | Y | Y
Masking | N | N | N | N | Y | Y | N | N | N
Medical Supports | Y | Y | Y | Y | Y | Y | Y | Y | Y
Multiplication Table, Science | N | N | Y | N | N | N | N | N | Y
Noise Buffers | Y | Y | Y | Y | Y | Y | Y | Y | Y
Print-on-Demand | N | N | N | N | Y | N | N | N | N
Read-Aloud in Spanish | N | N | N | N | N | Y | N | Y | Y
Read-Aloud Items | Y | Y | Y | Y | Y* | Y | Y | Y | Y
Science Charts | N | N | N | N | N | N | N | N | N
Scribe Items (items only [non-performance task full write]) | Y | Y | Y | Y | N | N | Y | Y | Y
Separate Setting | Y | Y | Y | Y | Y | Y | Y | Y | Y
Simplified Test Directions | N | N | N | N | Y | Y | Y | Y | Y
Translated Test Directions | N | N | N | Y | Y | Y | Y | N | Y
**Accommodations**

**Embedded**
Select a resource link to access its description. In the embedded accommodations table, “Y” indicates that the resource is available during testing and “N” indicates that the resource is not available during testing. The single asterisk (*) indicates that the closed-captioning accommodation is available for the listening portion of the CAASPP Smarter Balanced for ELA. The two asterisks (**) indicates that the text-to-speech accommodation is available for all domains except Reading.

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Non-Embedded Accommodation

Select a resource link to access its description. In the non-embedded accommodations table, “Y” indicates that the resource is available during testing and “N” indicates that the resource is not available during testing. The asterisk (*) indicates that the scribe writing accommodation is available for the performance task full write portion of the CAASPP Smarter Balanced for ELA.

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Universal Tools

All students may access features of the assessments that are either provided as digitally delivered components of the test administration system (embedded) or separate from it (non-embedded) based on student preference and selection. For example, Global Notes is an embedded universal tool; scratch paper is a non-embedded universal tool.

Universal tools are available for the listed, approved assessments and do not change the construct of what is being assessed. Students who receive these accessibility resources will receive a valid score.

Embedded

Embedded universal tools are selected by students during testing. They also may be selected by test examiners who are entering student responses to California Alternate Assessment (CAA) test questions on behalf of students unable to provide responses on their own in the test delivery system.

Breaks (Online Assessments)

Approved Assessment(s):

✓ All (online assessments)

Description:

Students select the [Pause] button, indicated in Figure 1, within the test to take a break from testing.

For the Smarter Balanced for English language arts/literacy (ELA) and mathematics, and California Science Test (CAST), the number of questions per session can be flexibly defined based on the student’s need.

- Breaks of more than 20 minutes will prevent the student from returning to questions already attempted by the student.
- There is no limit on the number of breaks that a student might be given.
- The use of this universal tool may result in the student needing additional overall time to complete the assessment.
For the CAAs for ELA, Mathematics, and Science, the test examiner can make the decision to pause and resume the test administration if the student is no longer engaged, is not actively participating, or is showing signs of behavioral or functional concerns related to the test. The test can be paused and resumed as many times as necessary to allow the student to show what the student knows. If the choice is made to pause the test, the student can reenter and complete testing on the same day or at a later time.

For the ELPAC:

- **Listening and Reading domains (but not the Speaking and Writing domains),** breaks of more than 20 minutes will prevent the student from returning to questions already attempted by the student.

- The test examiner can make the decision to pause and resume the test administration if the student is no longer engaged, is not actively participating, or is showing signs of behavioral or functional concerns related to the test. The test can be paused and resumed as many times as necessary to allow the student to show what the student knows. If the choice is made to pause the test, the student can reenter and complete testing on the same day or at a later time.
Accessibility Features for the CAASPP and Summative ELPAC | Universal Tools

**Calculator, Mathematics**

**Additional Resources:**

- Tutorial—[Embedded Universal Tools: Calculator Grades 6–8—English](#)
- Tutorial—[Embedded Universal Tools: Calculator Grades 6–8—Spanish](#)
- Tutorial—[Embedded Universal Tools: Calculator High School—English](#)
- Tutorial—[Embedded Universal Tools: Calculator High School—Spanish](#)
- Web page—[Basic (four-function) calculator](#)
- Web page—[Scientific calculator](#)
- Web page—[Graphing calculator](#)

**Approved Assessment(s):**

✓ Smarter Balanced for Mathematics (grades six through eight and grade eleven)

**Description:**

An embedded on-screen digital calculator can be accessed for calculator-allowed questions when students select the [Calculator] button. This button, indicated in Figure 2, appears when such questions are accessed.

![Figure 2. Basic mathematics calculator and [Calculator] button](#)
• This resource is available only with the specific questions for which the test’s specifications indicated that it would be appropriate.

• When the embedded calculator, as presented for all students, is not appropriate for a student (for example, for a student who is blind), the student may use the calculator offered with assistive technology devices, such as a talking calculator or a braille calculator.

• This universal tool is for use on calculator-allowed questions only in grades six through eight and grade eleven.

• Students who require a non-embedded calculator should be assigned to use the mathematics calculator non-embedded accommodation.
Calculator, Science

Additional Resources:

- Tutorial—Embedded Universal Tools: Calculator Grades 6–8—English (Calculator demo applies also to CAST grade five)
- Tutorial—Embedded Universal Tools: Calculator Grades 6–8—Spanish (Calculator demo applies also to CAST grade five)
- Tutorial—Embedded Universal Tools: Calculator High School—English
- Tutorial—Embedded Universal Tools: Calculator High School—Spanish
- Web page—Basic (four-function) calculator (grade five)
- Web page—Scientific calculator (grade eight and high school)

Approved Assessment(s):

✓ CAST

Description:

An embedded on-screen digital calculator can be accessed for calculator-allowed questions when students select the calculator button. This button, like the one indicated in Figure 3, appears when such questions are accessed.

![Scientific calculator and [Calculator] button](image-url)
• When the embedded calculator, as presented for all students, is not appropriate for a student (for example, for a student who is blind), the student may use the calculator offered with assistive technology devices, such as a talking calculator or a braille calculator.

• This universal tool is for use by students in grade five with a basic (four-function) calculator; and grades eight, ten, eleven, and twelve with a scientific calculator.

• Students who require a non-embedded calculator should be assigned to use the science calculator non-embedded designated support.

**Digital Notepad**

**Additional Resources:**
- Tutorial—[Embedded Universal Tools: Digital Notepad—English](#)
- Tutorial—[Embedded Universal Tools: Digital Notepad—Spanish](#)
- Tutorial—[California Spanish Assessment (CSA): Universal Tools—Digital Notepad (in English)](#)
- Tutorial—[CSA: Universal Tools—Digital Notepad Spanish](#)

**Approved Assessment(s):**

- ✓ All (online assessments)

**Description:**

This resource is used for making notes about a question. A student accesses the digital notepad by right-clicking on the test question or using the context menu (which is indicated in **Figure 4**) and then selecting *Notepad* from the shortcut menu.
The digital notepad is question-specific and is available through the end of the test segment.

For the California Assessment of Student Performance and Progress (CAASPP), notes are not saved when the student moves on to the next segment or after a break of more than 20 minutes.

For the ELPAC, notes are saved after a break of more than 20 minutes on the page to which the student is returning if there are multiple items on the page.
**English Dictionary (Writing)**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: English Dictionary—English
- Tutorial—Embedded Universal Tools: English Dictionary—Spanish

**Approved Assessment(s):**
- ✓ Smarter Balanced for ELA

**Description:**
An English dictionary is available for the full write portion of an ELA performance task. (A full write is the second part of a performance task.)

- A student accesses the English dictionary by selecting the [Dictionary] icon during specific test segments. This button is indicated in Figure 5.

![Image of English dictionary interface](image)

Figure 5. English dictionary

- Students must first type a word into the field next to the Merriam-Webster® logo and then select the [Dictionary] button, also indicated, to garner a result.
- The use of this universal tool may result in the student needing additional overall time to complete the assessment.
English Glossary

**Additional Resources:**
- Tutorial—Embedded Universal Tools: English Glossary—English
- Tutorial—Embedded Universal Tools: English Glossary—Spanish

**Approved Assessment(s):**
- ✓ Smarter Balanced for ELA
- ✓ Smarter Balanced for Mathematics
- ✓ CAST

**Description:**
Grade- and context-appropriate definitions of specific construct-irrelevant terms are shown in English on the screen via a pop-up window. An example is shown in Figure 6.

- The student can access the embedded glossary by selecting any of the preselected terms.
- This universal tool is for use in all ELA domains except Reading.
- The use of this universal tool may result in the student needing additional overall time to complete the assessment.

![Figure 6. English glossary](image)

The reader can infer that the narrator is in charge of the group. Which sentence from the text makes this point?

A. There we drove down the store of wild currants.
B. There was the campsite where we spent our Men’s Retreat.

**Figure 6. English glossary**
**Expandable Items**

**Additional Resources:**
- Tutorial—**Embedded Universal Tools: Expandable Items—English**
- Tutorial—**Embedded Universal Tools: Expandable Items—Spanish**
- Tutorial—**CSA: Universal Tools—Expandable Items** (in English)
- Tutorial—**CSA: Universal Tools—Spanish Expandable Items**

**Approved Assessment(s):**
- ✓ All (online assessments)

**Description:**
Each stimulus in the left pane and question(s) in the right pane can be expanded so that it takes up a larger portion of the screen when the student selects one of the two horizontal arrows between the passage and the question(s). The arrows are indicated in **Figure 7**.

![Figure 7. Expandable items](image)

- The right arrow expands the passage or stimulus; the left arrow contracts the expanded passage or stimulus and expands the question(s). However, if the test administrator or test examiner has turned off the Expandable Passages universal tool, the student would see the left arrow—to expand the pane with the test item—only.

- The default setting for this universal tool is **Off** and must be turned on by the test administrator or test examiner on the **Approvals and Student Test Settings** screen for the student (select the [See/Edit Details] eye [.eye] icon for a student before approving the test and then set the **Expandable Items** toggle to **On**).
Universal Tools

- This toggle is indicated in Figure 8.

![Figure 8. Test settings in the Test Administrator Interface](image)

- Students should be advised that this universal tool is available.
- For the CAAs for ELA and mathematics and the Summative ELPAC, the default setting is for all items to be expandable.
Expandable Passages

Additional Resources:
- Tutorial—Embedded Universal Tools: Expandable Passages—English
- Tutorial—Embedded Universal Tools: Expandable Passages—Spanish
- Tutorial—CSA: Universal Tools—Expandable Passages (in English)
- Tutorial—CSA: Universal Tools—Spanish Expandable Passages

Approved Assessment(s):
✓ All (online assessments)

Description:
Each passage or stimulus can be expanded so that it takes up a larger portion of the screen when the student selects one of the two arrows in the passage pane. The arrows are indicated in Figure 9.

![Figure 9. Expandable passages](image)

- Select the [Expand] arrows icon to expand the passage.
- This universal tool expands the passage only.
Global Notes (Writing)

Additional Resources:
- Tutorial—Embedded Universal Tools: Global Notes—English
- Tutorial—Embedded Universal Tools: Global Notes—Spanish

Approved Assessment(s):
- Smarter Balanced for ELA (performance tasks)

Description:
The global notes universal tool is a notepad that is available for ELA performance tasks in which students complete a full write (the second part of a performance task). The student selects the [Notes] icon, indicated in Figure 10, for the notepad to appear.

![Figure 10. Global notes](image)

During the ELA performance tasks, the notes are retained from segment to segment so that the student may go back to the notes even though the student is not able to go back to specific questions in the previous segment.
Highlighter

Additional Resources:
- Tutorial—Embedded Universal Tools: Highlighter—English
- Tutorial—Embedded Universal Tools: Highlighter—Spanish
- Tutorial—CSA: Universal Tools—Highlighter (in English)
- Tutorial—CSA: Universal Tools—Spanish Highlighter

Approved Assessment(s):
- All (online assessments)

Description:
Highlighter is a digital resource for marking desired text, questions, answers, or parts of these with one of four colors. Highlighted text remains available throughout each test segment. To use this tool, a student selects text and then selects Highlight Selection from the context menu (indicated in Figure 11). Finally, the student selects a color. (Note that colors in the CSA are presented in Spanish.)

Figure 11. Highlighter
Accessibility Features for the CAASPP and Summative ELPAC | Universal Tools

**Keyboard Navigation**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Keyboard Navigation—English
- Tutorial—Embedded Universal Tools: Keyboard Navigation—Spanish
- Web document—Keyboard Commands for Students

**Approved Assessment(s):**
- ✔ All (online assessments)

**Description:**
Navigation throughout text can be accomplished by using a keyboard.

**Line Reader**

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Line Reader—English
- Tutorial—Embedded Universal Tools: Line Reader—Spanish
- Tutorial—CSA: Universal Tools—Line Reader (in English)
- Tutorial—CSA: Universal Tools—Spanish Line Reader

**Approved Assessment(s):**
- ✔ All (online assessments)

**Description:**
A student moves an on-screen horizontal line that surrounds each line of text with shading after selecting the [Line Reader] line icon (indicated in Figure 12). To move the line reader, the student selects (clicks) anywhere on the next line to be shaded or uses the arrow keys on the keyboard.

![Figure 12. Line Reader](image)

Click on the two sentences that best show that James Watt formed new ideas for what steam might do to help humans.
This universal tool applies to both questions and passages.

Selecting an answer option with the line reader universal tool also will cause an option such as a radio button or checkbox to be selected.

- If the student selects the “Option B” radio button in a vertical list of answer options, selecting (clicking) Option B’s text will both shade the line of text in the line reader and select that answer option as the student’s response to the test question (Figure 13). Students must select a line of text away from a radio button answer option—in a passage or the test question, for example—to unselect the selected line as the focus of the line reader universal tool. However, that answer option is still selected as the student’s response unless or until the student selects a different option.

![Figure 13. Line Reader with a radio button](image)

- If the student selects the first checkbox in a vertical list of answer options, selecting (clicking) the first checkbox’s text will both shade the line of text in the line reader and select that answer option as one of the student’s responses to the test question (Figure 14). Students must select a line of text away from a checkbox answer option—in a passage or the test question, for example—to unselect the selected line as the focus of the line reader universal tool. However, that answer option is still selected as one of the student’s responses unless or until the student selects the checkbox to unselect it.

![Figure 14. Line Reader with a checkbox](image)
Mark for Review

**Additional Resources:**
- Tutorial—Embedded Universal Tools: Mark for Review—English
- Tutorial—Embedded Universal Tools: Mark for Review—Spanish
- Tutorial—CSA: Universal Tools—Mark for Review (in English)
- Tutorial—CSA: Universal Tools—Spanish Mark for Review

**Approved Assessment(s):**
- ✓ All (online assessments)

**Description:**
Mark for review allows a student to flag completed test questions—that is, those to which the student already has responded—for future review during the assessment by right-clicking the question and then selecting *Mark for Review* from the shortcut menu or by selecting *Mark for Review* from the context menu (indicated in Figure 15).

- Markings are not saved when the student moves on to the next segment or after a break of more than 20 minutes.
- Marked questions can be unmarked using the same context menu.

![Figure 15. Mark for review](image)
Figure 16 shows two questions that have been marked for review at the end of a segment. A student may select a question to return to it.

Congratulations, you reached the end of the test!
If there are items available for review, they will be displayed in the box below. If the box is blank, no additional items are available for review. Please complete any remaining item reviews, then click Submit Test at the bottom of the screen.

You have marked questions. Review these questions before submitting your test.

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15

Figure 16. Questions marked for review

Mathematics Tools

Approved Assessment(s):

✓ Smarter Balanced for Mathematics
✓ CAA for Mathematics
✓ CAST

Description:

These digital resources (i.e., embedded ruler, embedded protractor) are used for measurements related to mathematics or science questions. They are available only with the specific questions for which the test item specifications indicate that one or more of these resources would be appropriate.
Science Charts

Additional Resources:
- Tutorial—Embedded Universal Tools: Science Charts—English
- Tutorial—Embedded Universal Tools: Science Charts—Spanish

Approved Assessment(s):
✓ CAST

Description:
Students taking the grades eight and high school CAST assessments may refer to a periodic table of elements as a universal tool in grades eight, ten, eleven, and twelve. Students taking the grade eight and high school CAST assessments may refer to a reference sheet of formulas. The science chart in Figure 17 is the reference sheet that appears after the [Formulas] button has been selected.

![Science Charts](image-url)

Figure 17. Science charts (formulas reference sheet)
Science Tools

Approved Assessment(s):
✓ CAST

Description:
Students taking a CAST assessment may use a special embedded resource, if applicable, such as interactive laboratory equipment, videos, a stopwatch tool, or any combination of these to respond to a specific question.

Spanish Glossary

Additional Resources:
• Tutorial—Embedded Universal Tools: English Glossary—English
• Tutorial—Embedded Universal Tools: English Glossary—Spanish

Approved Assessment(s):
✓ CSA

Description:
Grade- and context-appropriate definitions of specific construct-irrelevant terms are shown in Spanish on the screen via a pop-up window. An example is shown in Figure 18.

• The student can access the embedded glossary by selecting any of the preselected terms.
• The use of this universal tool may result in the student needing additional overall time to complete the assessment.

Figure 18. Spanish glossary
Spell Check

Additional Resources:

- Tutorial—Embedded Universal Tools: Spell Check—English
- Tutorial—Embedded Universal Tools: Spell Check—Spanish

Approved Assessment(s):

✓ Smarter Balanced for ELA

Description:

Spell check is a writing tool for checking the spelling of words in student-generated responses. The [Spell Check] button on the Writing toolbar is indicated in Figure 19.

- Spell check only gives an indication that a word is misspelled; it does not provide the correct spelling.
- For ELA, spell check is bundled with other embedded writing tools for all performance task full writes (planning, drafting, revising, and editing). (A full write is the second part of a performance task.)
- This resource is available only with the specific questions for which the test item specifications indicated that it would be appropriate.
Strikethrough

Additional Resources:
- Tutorial—Embedded Universal Tools: Strikethrough—English
- Tutorial—Embedded Universal Tools: Strikethrough—Spanish
- Tutorial—CSA: Universal Tools—Strikethrough (in English)
- Tutorial—CSA: Universal Tools—Spanish Strikethrough

Approved Assessment(s):
✓ All (online assessments)

Description:
Strikethrough allows users to cross out answer options. If an answer option is an image, a strikethrough line will not appear, but the image will be grayed out. Select strikethrough by right-clicking the option and then selecting Strikethrough from the shortcut menu in the context menu (Figure 20). Options can be unstricken by selecting Undo Strikethrough.

![Figure 20. Strikethrough](image_url)
Additional Resources:
- Tutorial—Embedded Universal Tools: Thesaurus—English
- Tutorial—Embedded Universal Tools: Thesaurus—Spanish

Approved Assessment(s):
☑️ Smarter Balanced for ELA (performance task)

Description:
A thesaurus contains synonyms of terms that can be accessed while a student interacts with text included in the assessment.

- This universal tool is for use on ELA full write performance tasks. (A full write is the second part of a performance task.)
- A student accesses the thesaurus by selecting the [Dictionary] icon during specific test segments. This button is indicated in Figure 21.

Figure 21. English dictionary
• Students must first type a word into the field next to the Merriam-Webster® logo and then select the [Thesaurus] button, also indicated, to garner a result.

• The use of this universal tool may result in the student needing additional overall time to complete the assessment.

**Writing Tools**

**Approved Assessment(s):**
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAA for ELA
- CAST
- Summative ELPAC

**Description:**
Selected writing tools are available for all student-generated responses. (Also refer to spell check.) Writing tools are as follows:

- Bold
- Italic
- Underline
- Remove Format
- Numbered
- Bullet
- Outdent
- Indent
- Cut
- Copy
- Paste
- Undo
- Redo
- Spell check
- Language (English)
- Insert special character

Writing tools on the Writing toolbar are shown in **Figure 22.**

![Figure 22. Writing tools](image)
Zoom

**Additional Resources:**
- Tutorial—[Embedded Universal Tools: Zoom—English](#)
- Tutorial—[Embedded Universal Tools: Zoom—Spanish](#)
- Tutorial—[CSA: Universal Tools—Zoom](#) (in English)
- Tutorial—[CSA: Universal Tools—Spanish Zoom](#)

**Approved Assessment(s):**
- ✓ All (online assessments)

**Description:**
Zoom is a resource for making text or other graphics in a window or frame appear larger on the screen. The buttons controlling zoom are indicated in **Figure 23**.

![Figure 23. Zoom](#)

- The default font size for all tests is 14 point.
• The student can make text and graphics larger by selecting the [Zoom In] button. The student can select the [Zoom Out] button to return to the default or smaller print size. Zoom levels are shown in Table 2.

Table 2. Zoom Levels

<table>
<thead>
<tr>
<th>Level #</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>No zoom, 14-point text</td>
</tr>
<tr>
<td>Level 1</td>
<td>1.50× zoom</td>
</tr>
<tr>
<td>Level 2</td>
<td>1.75× zoom</td>
</tr>
<tr>
<td>Level 3</td>
<td>2.00× zoom</td>
</tr>
<tr>
<td>Level 4</td>
<td>2.50× zoom</td>
</tr>
</tbody>
</table>

• When using the zoom feature, the student changes the size of text and graphics on the current screen only, including the size of the navigation buttons. To increase the default print size so that it persists during the entire test (from 1.5× to 3× default size), the print (font) size must be set for the student as a test setting in the Test Operations Management System or set by the test administrator or test examiner prior to the start of the test. This is the only feature that test administrators and test examiners can set.

• The use of this resource may result in the student needing additional overall time to complete the assessment.

• To set the zoom to a size larger than 3× default, refer to the Streamline embedded designated support.

Non-Embedded

Non-embedded universal tools are provided by the test administrator or test examiner to students at the time of testing.

**Breaks (Paper-pencil Tests)**

**Approved Assessment(s):**

✔ Smarter Balanced for ELA (paper-pencil test)
✔ Smarter Balanced for Mathematics (paper-pencil test)

**Description:**

Breaks may be given at predetermined intervals or after completion of sections of the assessment for students taking a paper-based test. Sometimes students are allowed to take breaks when individually needed to reduce cognitive fatigue when they experience heavy assessment demands.

The use of this resource may result in the student needing additional overall time to complete the assessment.
English Dictionary (Writing)

Approved Assessment(s):
- ✓ Smarter Balanced for ELA

Description:
An English dictionary can be provided for the full write portion of an ELA performance task. (A full write is the second part of a performance task.)
The use of this resource may result in the student needing additional overall time to complete the assessment.

Highlighter

Approved Assessment(s):
- ✓ Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Highlighter is a resource for marking desired text, questions, answers, or parts of these with a colored pen. Students are permitted to use a highlighter in the Test Book.

Mark for Review (Grade Two)

Approved Assessment(s):
- ✓ Summative ELPAC (Writing domain for grade two)

Description:
Students may mark in their Test Books, including noting items for review.

Oral Clarification of Test Directions in English

Approved Assessment(s):
- ✓ Summative ELPAC (online assessments)
- ✓ Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
The test examiner clarifies test directions to students in English.
Scratch Paper

Approved Assessment(s):

✓ All

Description:
Scratch paper to make notes, write computations, or record responses may be made available.

- Only plain paper or lined paper is appropriate for ELA.
- Graph paper is required beginning in sixth grade and can be used on all mathematics assessments.
- A whiteboard with marker may be used as scratch paper.
- As long as the construct being measured is not impacted, assistive technology devices, including low-tech assistive technology (Math Window), are permitted to make notes. The assistive technology device needs to be consistent with the student’s IEP or Section 504 plan.
- Access to the internet must be disabled on assistive technology devices.

Computer Adaptive Test (CAT) and the CAST:

- All scratch paper must be collected and securely destroyed at the end of each ELA and mathematics CAT assessment session and the CAST to maintain test security.
- All notes on whiteboards or assistive technology devices must be erased at the end of each CAT session.

Performance Tasks:

- For mathematics and ELA performance tasks, if a student needs to take the performance task in more than one session, scratch paper, whiteboards, assistive technology devices, or any combination of these may be collected at the end of each session, securely stored, and made available to the student at the next performance task testing session.
- Once the student completes the performance task, the scratch paper must be collected and securely destroyed, whiteboards should be erased, and notes on assistive technology devices should be erased to maintain test security.
Accessibility Features for the CAASPP and Summative ELPAC | Universal Tools

**Test Navigation Assistant**

**Additional Resource:**
- Web document—[ELPAC Test Navigation Assistant and Designated Interface Assistant Use Scenarios](#)

**Approved Assessment(s):**
- Summative ELPAC (online assessments)

**Description:**
New arrivals, students who are unfamiliar with the test delivery device or are technology novices and do not have the necessary computer skills to participate in the computer-based ELPAC may have a trained test examiner help with mouse point-and-click and scroll bar assistance, onscreen tool or button navigation (i.e., back, next, submit, start and stop recording, play speaking, and recording), and keyboarding assistance necessary for starting the test session.

- The test examiner is allowed to assist only with the technology as indicated by the student.
- Test navigation assistant can be used during one-on-one or group administrations.
- The use of keyboarding assistance in the test is not permitted.

Test navigation assistant must follow approved guidelines in the [Use Scenarios](#) document.

**Thesaurus**

**Approved Assessment(s):**
- Smarter Balanced for ELA (performance task)

**Description:**
A thesaurus contains synonyms of terms that can be accessed while a student interacts with text included in the assessment. The use of this universal tool may result in the student needing additional overall time to complete the assessment.

This resource is for use on ELA full write performance tasks. (A full write is the second part of a performance task.)
Designated Supports

Designated supports, which are accessibility features of the assessments, are available for use by any student for whom the need has been indicated by an educator (or team of educators working with the parent/guardian and student). They are either provided as digitally delivered components of the test administration system (embedded) or separate from it (non-embedded). For example, stacked translations in Spanish for mathematics is an embedded designated support; a scribe for English language arts/literacy (ELA) nonwriting questions and mathematics questions is a non-embedded designated support.

Designated supports are available for the listed, approved assessments and do not change the construct of what is being assessed. Students who receive these accessibility resources will receive a valid score.

Designated supports are set in the Test Operations Management System (TOMS) by a local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) or English Language Proficiency Assessments for California (ELPAC) coordinator or CAASPP or ELPAC test site coordinator.

Embedded

Color Contrast

Approved Assessment(s):
✓ All (online assessments)

Description:
The adjustment of screen background or font color is based on student needs or preferences and set in TOMS for the student. Color contrast may include reversing the colors for the entire interface or choosing the color of font and background. Choices are as follows:

- reverse contrast
- black on rose
- medium gray on light gray
- yellow on blue
The sample in Figure 24 shows reverse contrast.

![Figure 24. Color contrast (reverse contrast)](image)

**Use:**

Students with attention difficulties may need this resource for viewing test content.

- It also may be needed by some students with visual impairment or other print disabilities (including learning disabilities).
- Choice of colors should be informed by evidence that color selections meet the student’s needs.
Masking

Additional Resources:
- Tutorial—Embedded Designated Supports: Masking—English
- Tutorial—Embedded Designated Supports: Masking—Spanish

Approved Assessment(s):
- All (online assessments)

Description:
Masking involves blocking off content that is not of immediate need or that may be distracting to the student. Students are able to focus their attention on a specific part of a test question by masking. In Figure 25, the [Masking] button is indicated, and an arrow indicates the masked portion of the answer options.

![Figure 25. Masking](image)

Use:
Students with attention difficulties may need to mask content not of immediate need or that may be distracting during the assessment.
- This resource also may be needed by students with print disabilities (including learning disabilities) or visual impairment.
- Masking allows students to hide and reveal individual answer options, as well as all navigational buttons and menus.
Mouse Pointer (Size and Color)

**Additional Resources:**
- Tutorial—Embedded Designated Supports: Mouse Pointer—English
- Tutorial—Embedded Designated Supports: Mouse Pointer—Spanish

**Approved Assessment(s):**
- All (online assessments)

**Description:**
Mouse pointer is a test setting for students who are visually impaired and need the mouse pointer to be larger or a different color to more readily find their mouse pointer on the screen. An enlarged mouse pointer is shown in Figure 26.

![Mouse Pointer](image)

Click on the two sentences that best show that James Watt formed new ideas for what steam might do to help humans.

"There is a wonder of power in steam," he said to himself. "There was never a giant who had so much strength. If we only knew how to harness that power, there is no end to the things it might do for us. It would not only lift weights, but it would turn all kinds of machinery. It would draw our wagons, it would push our ships, it would plow and cut; it would spin and weave. For thousands of years men have been working...

**Figure 26. Mouse pointer**

While the mouse pointer resource can be used with the zoom universal tool, the enlarged mouse pointer is built into the magnification universal tool.

What follows are the options for the mouse pointer designated support:

- Large, Black Mouse Pointer
- Extra Large, Black Mouse Pointer
- Large, Green Mouse Pointer
- Extra Large, Green Mouse Pointer
- Large, Red Mouse Pointer
- Extra Large, Red Mouse Pointer
- Extra Large, White Mouse Pointer
- Extra Large, White Mouse Pointer
- Large, Yellow Mouse Pointer
- Extra Large, Yellow Mouse Pointer
Pause or Replay Audio (Listening Domain)

Approved Assessment(s):
✓ Summative ELPAC (online assessments)

Description:
Students who may need the audio to slow down or stop momentarily may have the stimulus of the audio presentation in the Listening domain be paused or replayed during the administration of the test questions.

Pause or Replay Audio (Speaking Domain)

Approved Assessment(s):
✓ Summative ELPAC (online assessments)

Description:
Students who may need the audio to slow down or stop momentarily may have the stimulus of the audio presentation in the Speaking domain paused or replayed during the administration of the test questions in the Summarize an Academic Presentation task.

Permissive Mode (Setting)

Note: Permissive mode is compatible with supported desktop operating system versions of macOS and Windows only.

Approved Assessment(s):
✓ All (online assessments)

Description:
Permissive mode is a test setting that should be enabled for students who require access to approved accessibility software, devices, or both in order to interact with the test (e.g., screen readers, magnifiers, speech-to-text, braille screen readers, refreshable braille displays, etc.). When permissive mode is disabled, the only application that can be open on the computer is the secure browser.
Print Size (Setting)

Approved Assessment(s):
 ✓ All (online assessments)

Description:
Print size is a test setting that sets the default font size the student should have when starting an online test. This setting applies to text questions and stimuli only and not the buttons in the global menu bar.

- The selected font size becomes the default for all questions in that student's test.
- The default font size for all tests is 14 point.
- The default font for ELA tests is Times New Roman.
- The default font for mathematics tests is Verdana.

Stacked Translations (Spanish)

Additional Resources:
- Tutorial—Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions—English
- Tutorial—Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions—Spanish

Approved Assessment(s):
 ✓ Smarter Balanced for Mathematics
 ✓ California Science Test (CAST)

Description:
Stacked translations are a language resource for some students. They provide the full translation of each test question in Spanish above the original question in English as well as all on-screen directions in Spanish.
A practice test question using the stacked translation designated support is shown in Figure 27.

![Figure 27. Stacked translations, mathematics](image)

**Use:**

This resource is for students whose primary language is not English, who use dual language supports in the classroom, or both. For these students, use of the stacked (dual language) translation may be appropriate.

- Students participate in the assessment regardless of the language.
- This resource will increase reading load and cognitive load.
- This resource should be used only for students who are proficient readers in Spanish and not proficient in English.
- Because this resource will likely be confusing and may impede the performance of students who have not used it previously, students to whom stacked translations have been assigned should use it in a practice or training test to ensure its appropriateness.
- Stacked translations in Spanish are available in conjunction with the embedded translated test directions in Spanish.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.
Accessibility Features for the CAASPP and Summative ELPAC | Designated Supports

**Streamline**

<table>
<thead>
<tr>
<th><strong>Additional Resources:</strong></th>
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<tbody>
<tr>
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</tr>
<tr>
<td>• Tutorial—<a href="#">Embedded Designated Supports: Streamline—Spanish</a></td>
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<tr>
<td>• Subsection in this manual—<a href="#">Using Streamline Mode</a></td>
</tr>
</tbody>
</table>

**Approved Assessment(s):**
- ✓ All (online assessments)

**Description:**
This designated support provides a streamlined interface of the test in an alternate, simplified format in which the questions are displayed below the stimuli vertically; it is designed to interact with Job Access With Speech (JAWS®) navigation.

This designated support includes zoom levels greater than 3× in the student interface. The sample in **Figure 28** shows a full-screen zoom that includes navigation buttons and a question passage.

**Use:**
This designated support may benefit a small number of students who have specific learning disabilities, reading disabilities, or both, in which the text is presented in a more sequential format.

---

![Figure 28. Streamline sample](image)
**Text-to-Speech**

**Additional Resources:**
- Web document—[Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5](#)

(Refer also to the embedded text-to-speech accommodation for ELA reading passages.)

**Approved Assessment(s):**
- Smarter Balanced for ELA (items only)
- Smarter Balanced for Mathematics (stimuli and items)
- CAST (stimuli and items)
- California Spanish Assessment (CSA) (items)
- Summative ELPAC (except for the Reading domain)

**Description:**
Text for mathematics, science, and CSA stimuli and items as well as ELA items is read aloud to the student via embedded text-to-speech technology that uses a simulated, not a human, voice. The student is able to control the speed as well as raise or lower the volume of the voice via a volume control.

**Use:**
Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud. To use this designated support, a student must select either *Speak Question* or *Speak Option* from the context menu (indicated in Figure 29).

![Figure 29. Text-to-speech](#)
This resource also may be needed by:

- students with reading-related disabilities,
- struggling readers, or
- students who are blind and do not yet have adequate braille skills.

This resource will likely be confusing and may impede the performance of students who do not regularly have the resource during instruction.

Simulated voices may not provide the same emphasis and other qualities of a natural, human voice when reading.

Students who use text-to-speech will need headphones unless tested individually in a separate setting.

The technical coordinator at the LEA or test site should ensure that the network bandwidth at the test site is sufficient to support the number of students who will be using this resource concurrently during testing.

Limitations:

On specific CSA multiple-choice questions, the student may be asked about a portion of the text that may need to be revised. For these questions, students will be presented with four answer choices, each with different versions of the written text. Each answer choice will be followed by a repetition of the answer choice in context of the original excerpt. The answer choices in context are preceded by introductory statements such as, “La oración con cambio, lee” or “La definición lee.” In some instances, students may want to navigate word-by-word or character-by-character to discern any grammatical or punctuation errors, in addition to addressing any words that may not be pronounced clearly by an assistive technology. Additional information about this portion of the test is included in the test directions.
Translated Test Directions (Spanish)

Additional Resources:
- Tutorial—Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions—English
- Tutorial—Embedded Designated Supports: Spanish Stacked Translations and Translated Test Directions—Spanish

Approved Assessment(s):
- ✓ Smarter Balanced for Mathematics
- ✓ CAST

Description:
Translation of test directions is a language resource available prior to beginning the actual test questions.
- Embedded test directions in Spanish are available in conjunction with the stacked translations in Spanish.
- On-screen directions are in Spanish.
- As an embedded designated support, translated test directions are automatically a part of the stacked translation designated support. Translated buttons are indicated in Figure 30.

![Figure 30. Translated test directions](image)

Select the expression that is equivalent to \((m^2 - 25)\).

Se selecciona la expresión que es equivalente a \((m^2 - 25)\).
Use:

- Students who have limited English language skills can use the translated directions resource.
- This resource should be used only for students who are proficient readers in Spanish and not proficient in English.
- Because this resource will likely be confusing and may impede the performance of students who have not used it previously, students to whom stacked translations have been assigned should use it in a practice or training test to ensure its appropriateness.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.

Translation Glossaries

Additional Resources:

- Tutorial—Embedded Designated Supports: Translation Glossary—English
- Tutorial—Embedded Designated Supports: Translation Glossary—Spanish
- Tutorial—Illustration Glossaries
- Web document—Instructions for Using Embedded English and Translation Glossaries

Approved Assessment(s):

✓ Smarter Balanced for Mathematics
✓ CAST

Description:

Translated glossaries are a language resource.

- The translated glossaries are provided for selected construct-irrelevant terms for mathematics.
- Translations for these terms appear on the computer screen when students select them.
- This designated support can be set as either an illustration glossary, the language of translation, or the language of translation and English.
- Students can also select the audio icon next to the glossary term—indicated in Figure 31—and listen to the audio recording of the glossary for language glossaries only.
• In addition to the illustration glossary, current languages of translations for mathematics are as follows:
  - Arabic
  - Burmese
  - Cantonese
  - Hmong
  - Ilokano
  - Korean
  - Mandarin
  - Punjabi
  - Russian
  - Somali
  - Spanish
  - Tagalog
  - Ukrainian
  - Vietnamese

• Current languages of translations for science are as follows:
  - Arabic
  - Cantonese
  - Hmong
  - Korean
  - Mandarin
  - Punjabi
  - Russian
  - Spanish
  - Tagalog
  - Vietnamese

Use:
Students who have limited English language skills (whether or not designated as English learners [ELs] or ELs with disabilities) can use the translation glossary for specific questions. The use of this designated support may result in the student needing additional overall time to complete the assessment.
Turn Off Any Universal Tools

Approved Assessment(s):
✓ All (online assessments)

Description:
Any universal tools that might be distracting or that students do not need to use or are unable to use may be disabled by the test administrator or test examiner in the Test Administrator Interface before a test is approved. Highlighter is an example of a universal tool that can be toggled off and is indicated in Figure 32.

![General Testing Resources]

Figure 32. Turn off any universal tools

Use:
Students who are easily distracted (whether or not designated as having attention difficulties or disabilities) may be overwhelmed by some of the universal tools. Knowing which specific resource may be distracting is important for determining which universal tool(s) to turn off.
Non-Embedded

100s Number Table, Science

Additional Resources:
- Web document—100s Number Table

Approved Assessment(s):
- California Alternate Assessment (CAA) for Science
- CAST

Description:
The 100s number table is a paper-based table listing numbers from 1–100 available for reference.

Use:
Students with visual processing or spatial perception needs may find this designated support beneficial.

American Sign Language (ASL) or Manually Coded English

Approved Assessment(s):
- Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Students who are deaf or hard of hearing and who typically use Manually Coded English can have the test directions signed to them.

Use:
Some students who are deaf or hard of hearing and who typically use ASL may need this accommodation to receive the test directions.

- The use of this accommodation may result in the student needing additional overall time to complete the assessment.
- For many students who are deaf or hard of hearing, viewing signs is the only way to access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the test directions.
**Amplification**

**Approved Assessment(s):**
- All

**Description:**
Students may adjust the volume control beyond the testing device’s built-in settings using headphones or another non-embedded device.

**Use:**
A student with a hearing impairment may use headphones, assistive technology, noise buffers, or white noise machines to increase the volume provided in the test delivery system.

- Use of this resource may require a separate setting.
- If the amplification device has additional features that may compromise test security (such as internet access), the functionality should be disabled before testing.

**Bilingual Dictionary**

**Approved Assessment(s):**
- Smarter Balanced for ELA (performance task full writes)

**Description:**
A bilingual or dual language word-to-word dictionary is a language resource.

- A bilingual or dual language word-to-word dictionary can be provided for the full write portion of an ELA performance task.
- A full write is the second part of a performance task.
- This designated support is for use with ELA full write performance tasks only.

**Use:**
For students whose primary language is not English and who use dual language supports in the classroom, use of a standard published bilingual or dual language word-to-word dictionary may be appropriate.

- Students participate in the assessment regardless of the language.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.
Calculator, Science

Description:
A non-embedded calculator may be used by students needing a special calculator, such as a braille calculator or a talking calculator, which is currently unavailable within the assessment platform. This designated support is for use by students in grade five with a four-function calculator; and grades eight, ten, eleven, and twelve with a scientific calculator.

Approved Assessment(s):
✓ CAST

Use:
Students with visual impairment who are unable to use the embedded calculator for calculator-allowed questions will be able to use the calculator that they typically use, such as a braille calculator or a talking calculator. Test administrators should ensure that the calculator is available only for designated calculator questions.

Color Contrast

Approved Assessment(s):
✓ All (online assessments)

Description:
Test content of online questions may be printed with different colors using a color printer. This non-embedded designated support must be used in conjunction with print-on-demand.

Use:
Students with attention difficulties may need this resource for viewing the test when digitally provided color contrasts do not meet their needs.

- Some students with visual impairment or other print disabilities (including learning disabilities) also may need this resource.
- Choice of colors should be informed by evidence of those colors that meet the student’s needs.
Color Overlay

Approved Assessment(s):

- All

Description:
Color transparencies are placed over a paper-based assessment, such as one that has been printed on demand.

Use:
Students with attention difficulties may need this resource to view test content.

- This resource also may be needed by some students with visual impairment or other print disabilities (including learning disabilities).
- Choice of color should be informed by evidence of those colors that meet the student’s needs.

Designated Interface Assistant (DIA)

Additional Resource:
- Web document—ELPAC Test Navigation Assistant and Designated Interface Assistant Use Scenarios web document

Approved Assessment(s):

- Summative ELPAC (online assessments)

Description:
This designated support is available to students who are technology novices and have limited keyboarding skills that prevent them from responding.

Use:
The DIA is available to help the student interact with, or type, their hand-written responses into the test delivery system. The DIA support should be used only during one-on-one administration.

The DIA must follow approved guidelines in the Use Scenarios document.
**Magnification**

**Approved Assessment(s):**
- ✔ All

**Description:**
The size of specific areas of the screen (e.g., text, formulas, tables, graphics, and navigation buttons) may be adjusted by the student with an assistive technology device. Magnification increases the size and color contrast of the student’s on-screen presentation to levels not provided by the zoom universal tool, color contrast designated support, mouse pointer designated support, or any combination of these.

**Use:**
Students used to viewing enlarged text or graphics, or navigation buttons may need magnification to comfortably view content.
- This resource also may meet the needs of students with visual impairment and other print disabilities.
- Because magnification increases the size and color contrast of the student’s on-screen presentation, students may not need also to use the zoom universal tool, color contrast designated support, mouse pointer designated support, or any combination of these.
- The use of this designated support may result in the student needing additional overall time to complete the assessment.

**Masking**

**Approved Assessment(s):**
- ✔ Summative ELPAC (online assessments)
- ✔ Summative ELPAC (Writing domain for kindergarten through grade two)

**Description:**
Masking involves blocking off content that is not of immediate need or that may be distracting to the student. Students are able to focus their attention on a specific part of a test question by masking.

**Use:**
Students with attention difficulties may need to mask content not of immediate need or that may be distracting during the assessment. This resource also may be needed by students with print disabilities (including learning disabilities) or visual impairment.
Medical Supports

Approved Assessment(s):
- All

Description:
Students may have access to an electronic device for medical purposes (e.g., glucose monitor). The device may include a cell phone, and should only support the student during testing for medical reasons.

Use:
Follow local policies regarding medical devices and ensure students’ health is the highest priority.
- Device settings must restrict access to other applications, or the test administrator or test examiner must closely monitor the use of the device to maintain test security.
- Use of electronic devices may require a separate setting to avoid distractions to other test takers and to ensure test security. For example, a student using a cell phone in conjunction with a wireless blood testing kit should be monitored to ensure the cell phone is used for medical reasons only during testing.

Multiplication Table, Science

Additional Resources:
- Web document—Multiplication Table

Approved Assessment(s):
- CAST
- CAA for Science

Description:
A paper-based single-digit (1–9) multiplication table is a resource.

Use:
The multiplication table is for students with a documented and persistent calculation disability (i.e., dyscalculia).
Noise Buffers

Approved Assessment(s):

✓ All

Description:
Noise buffers are equipment such as ear mufflers, white noise machines, or other devices used to block external sounds.

Use:
A student (not groups of students) wears equipment to reduce environmental noises.

• Students may have these testing variations if regularly used in the classroom.

• Students who use noise buffers will need headphones unless tested individually in a separate setting.

Print-on-Demand

Approved Assessment(s):

✓ Summative ELPAC (online assessments)

The ability to print on demand is available only if the LEA ELPAC coordinator has received permission by contacting the California Technical Assistance Center.

Description:
Paper copies of passages, stimuli, questions, or any combination of these are printed for students.

Use:
Some students with disabilities may need paper copies of passages, stimuli, questions, or any combination of these.

• A very small percentage of students should need this accommodation.

• The use of this accommodation may result in the student needing additional time to complete the assessment.

• It is not necessary to request the print-on-demand accommodation when assigning the braille accommodation.
Read-Aloud in Spanish

Additional Resources:
- Web document—Read Aloud Guidelines in Spanish
- Web document—Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

Approved Assessment(s):
- Smarter Balanced for Mathematics
- CAST

Description:
Spanish text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided by Smarter Balanced. All or portions of the content as presented in the Spanish stacked translation may be read aloud.

Use:
Spanish-speaking students receiving the Translations (stacked) designated support and who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud.

- This resource also may be needed by students with reading-related disabilities.
- If not used regularly during instruction, this resource is likely to be confusing and may impede the performance on assessments.
- A student should have the option of asking a reader to slow down or repeat text.
- The use of this designated support may result in the student needing additional overall time to complete the assessment, the use of a separate setting, or both.
Read-Aloud Items

Additional Resources:

- Web document—Read Aloud Guidelines
- Web document—Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

(Refer also to the non-embedded read-aloud accommodation for ELA reading passages.)

Approved Assessment(s):

- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST
- CSA
- Summative ELPAC (Writing domain only)

Description:

Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines, such as those provided by Smarter Balanced. All or portions of the content may be read aloud.

Qualifications for test readers are as follows:1

- The test reader should be an adult who is familiar with the student and who is typically responsible for providing this support during educational instruction and assessments.
- Test readers must be trained on the administration of the assessment in accordance with member policy, and familiar with the terminology and symbols specific to the test content and related conventions for standard oral communication.
- For the CAASPP, test readers must be trained in accordance with Smarter Balanced and member administration and security policies and procedures as articulated in Consortium and member test administration manuals, guidelines, and related documentation.

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Use:
Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud.

- This resource also may be needed by students with reading-related disabilities or by students who are blind and do not yet have adequate braille skills.
- For mathematics, this resource applies to stimuli and questions.
- If not used regularly during instruction, this resource is likely to be confusing and may impede the performance on assessments.
- Readers should be provided to students on an individual basis, not to a group of students.
- A student should have the option of asking a reader to slow down or repeat text.
- The use of this designated support may result in the student needing additional overall time to complete the assessment, the use of a separate setting, or both.

Science Charts

Additional Resources:

- Web document—CAST Periodic Table of the Elements, Grade Eight and High School
- Web document—CAST Formulas Reference Sheet, Grade Eight
- Web document—CAST Formulas Reference Sheet, High School

Approved Assessment(s):

✔ CAST

Description:
Students taking the grade eight and high school CAST assessments may refer to a state-approved, paper-based, periodic table of elements as a designated support in grades eight, ten, eleven, and twelve. Students taking the grade eight and high school CAST assessments may refer to a state-approved reference sheet. These resources are available for download as PDFs. Students may alternatively use a different periodic table that they have been using in class and is listed in an IEP or Section 504 plan after a request for this use as an unlisted resource has been approved.
Scribe Items

Additional Resources:
- Web document—Scribing Protocol

(Refer also to the non-embedded scribe accommodation for writing.)

Approved Assessment(s):
- Smarter Balanced for ELA (except for full write performance task)
- Smarter Balanced for Mathematics
- CAA for ELA
- CAA for Mathematics
- CAA for Science
- CAST
- CSA

Description:
Students dictate their responses to a human who records verbatim what they dictate.

- The scribe must be trained and qualified, and must follow the administration guidelines provided by Smarter Balanced.
- This designated support is for use with mathematics, science, and reading and listening (i.e., nonwriting) ELA questions only; it does not apply to the ELA full write performance task.

Use:
Students who have documented significant motor or processing difficulties, or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce responses may need to dictate their responses to a human, who then records the students’ responses verbatim. The use of this resource may result in the student needing additional overall time to complete the assessment.
Separate Setting

Approved Assessment(s):

✓ All

Description:
Test location is altered so that the student is tested in a setting different from that made available for most students.

Use:
Students who are easily distracted (or may distract others) in the presence of other students, for example, may need an alternate location to be able to take the assessment.

• The separate setting may be in a different room that allows them to work individually or among a smaller group or to use a device requiring voicing (e.g., a WhisperPhone) or use amplification.
• The separate setting may include a calming device or support as recommended by educators or specialists.
• The separate setting may be in the same room but in a specific location (for example, away from windows, doors, or pencil sharpeners; in a study carrel; near the teacher’s desk; or in the front of a classroom).
• Students also may need specific adjustment to their testing environment to remove obstacles to a comfortable test experience.
• Some students may benefit from being in an environment that allows for movement, such as being able to walk around.
• Some students also may benefit from testing at a particular time of day.
• Students using the amplification non-embedded designated support may need a separate setting to avoid disturbing other students who are testing.
• Other adjustments to the testing environment include special lighting, acoustics, and adaptive furniture.
• In some instances, students may need to interact with instructional or test content outside of school, such as in a hospital or their home.
Simplified Test Directions

Additional Resources:
- Web document—Guidelines for Simplified Test Directions

Approved Assessment(s):
- ✓ Smarter Balanced for ELA
- ✓ Smarter Balanced for Mathematics
- ✓ CAST
- ✓ CSA
- ✓ Summative ELPAC (online assessments)
- ✓ Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
The test administrator or test examiner simplifies or paraphrases the test directions found in the test administration manual or Directions for Administration (DFA) according to the Guidelines for Simplified Test Directions.

Use:
Students who need additional support understanding the test directions may benefit from this resource. This designated support may require testing in a separate setting to avoid distracting other test takers.
Transcribed Test Directions

Additional Resources:
- CAST Translated Test Directions web page—http://www.caaspp.org/ta-resources/cast-directions.html
- ELPAC Student Accessibility Resources web page—http://elpac.org/test-administration/accessibility-resources/

Approved Assessment(s):
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST
- Summative ELPAC (online assessments)
- Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
A student uses a PDF of directions translated in each of the languages currently supported.

- A bilingual adult can read to a student.
- Translated test directions PDFs are available in the following languages for ELA:
  - Arabic (Saudi and Egypt)
  - Burmese
  - Cantonese (Traditional and Simplified)
  - Dakota
  - Filipino (Tagalog and Ilokano)
  - French
  - Haitian Creole
  - Hmong
  - Japanese
  - Korean
  - Lakota
  - Mandarin (Traditional and Simplified)
  - Punjabi (Indian [East] and Pakistani [West])
  - Russian
  - Somali
  - Spanish (ELA only)
  - Ukrainian
  - Vietnamese (North and South)
  - Yup’ik
• Translated test directions PDFs are available in the following languages for mathematics:
  - Arabic (Saudi and Egypt)
  - Burmese
  - Cantonese (Traditional and Simplified)
  - Dakota
  - Filipino

  - French
  - Haitian Creole
  - Hmong
  - Japanese
  - Korean
  - Lakota
  - Mandarin (Traditional and Simplified)

  - Punjabi (Pakistani and Indian)
  - Russian
  - Somali
  - Ukrainian
  - Vietnamese (North and South)
  - Yupik

• Translated test directions PDFs are available in the following languages for the CAST:
  - Arabic
  - Armenian
  - Cantonese
  - Farsi
  - Hindi
  - Hmong

  - Japanese
  - Khmer
  - Korean
  - Mandarin
  - Punjabi

  - Russian
  - Tagalog
  - Telugu
  - Urdu
  - Vietnamese

• Translated test directions PDFs are available in the following languages for the Summative ELPAC:
  - Arabic
  - Armenian
  - Chinese (Traditional)
  - Farsi
  - Hindi

  - Hmong
  - Japanese
  - Khmer
  - Korean
  - Mandarin
  - Punjabi

  - Russian
  - Spanish
  - Tagalog
  - Telugu
  - Urdu
  - Vietnamese

Use:
Students who have limited English language skills (whether or not designated as ELs or ELs with disabilities) can use the translated test directions.

• In addition, a biliterate adult trained in the test administration manual or DFA can read the test directions to the student.

• The use of this designated support may result in the student needing additional overall time to complete the assessment.
Accommodations

Accommodations are changes in procedures or materials that increase equitable access during California Assessment of Student Performance and Progress (CAASPP) or English Language Proficiency Assessments for California (ELPAC) administration. Assessment accommodations generate valid assessment results for students who need them; they allow these students to show what they know and can do. Accommodations are available for assignment to students with documented individualized education programs (IEPs) or Section 504 plans. Accommodations do not compromise the learning expectations, construct, grade-level standard, or intended outcome of the assessments. They are either provided as embedded components of the test administration system or are non-embedded. For example, braille is an embedded accommodation; the use of alternate response options is a non-embedded accommodation.

Accommodations are available for the listed, approved assessments and do not change the construct of what is being assessed. Students who receive these accessibility resources will receive a valid score.

Accommodations are assigned in the Test Operations Management System (TOMS) by a local educational agency (LEA) CAASPP or ELPAC coordinator or CAASPP or ELPAC test site coordinator.

Note: To ensure a student remains eligible to receive accommodations, unlisted resources, or both, the California Longitudinal Pupil Achievement Data System (CALPADS) education program code field must be set for “special education” (value 144) and provide a primary disability category or “504 Plan” (value 101).
Embedded

**American Sign Language (ASL)**

**Additional Resources:**
- Tutorial—Embedded Accommodations: American Sign Language—English
- Tutorial—Embedded Accommodations: American Sign Language—Spanish

**Approved Assessment(s):**
- Smarter Balanced for English Language Arts/Literacy (ELA) (Listening)
- Smarter Balanced for Mathematics
- California Science Test (CAST)
- Summative ELPAC (online assessments; Listening, Speaking, and Writing domains)

**Description:**
Test content is translated into ASL video.

- ASL human signer and the signed test content are viewed on the same screen.
- Students may view portions of the ASL video as often as needed by selecting *American Sign Language* from the context menu, as displayed in *Figure 33*.

![Figure 33. American Sign Language](image-url)
Use:
Some students who are deaf or hard of hearing and who typically use ASL may need this accommodation when accessing text-based content in the assessment.

- The use of this accommodation may result in the student needing additional overall time to complete the assessment.
- For many students who are deaf or hard of hearing, viewing signs is the only way to access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.
- For the ELPAC Speaking domain, if a student using an embedded ASL accommodation responds using ASL, an ASL interpreter would need to appropriately scribe the response and record the student response score into the test delivery system.

Audio Transcript (Includes Braille Transcript)

Additional Resources:
- Tutorial—Embedded Accommodations: Audio Transcript—English
- Tutorial—Embedded Accommodations: Audio Transcript—Spanish

Approved Assessment(s):
- Smarter Balanced for ELA (Listening)
- CAST (This resource is approved for use; however, there are currently no audio questions for the CAST.)
- California Spanish Assessment (CSA) (Listening)
- Summative ELPAC (online assessments)

Description:
Content that is accessed through listening during the course of the assessment with the option of closed-captioning is made available in braille or on-screen as a single text presentation (rather than one line at a time as provided by closed-captioning).
The [Transcripts] icon the student selects to request a transcript is indicated in Figure 34; while the sample transcript is the on-screen, audio transcript that appears in a pop-up box, this accommodation also is available in refreshable braille.

Use:
Some students who are deaf or hard of hearing, visually impaired, or both may have difficulty with portions of the assessment acquired by listening, and the closed-captioning does not provide adequate support to assist the student’s testing.

- Students who require the closed-captions to be presented in braille also must have the braille embedded accommodation set.
- When the closed-captions are presented in braille, they are available in the following braille codes:
  - English Braille American Edition (EBAE) uncontracted
  - EBAE contracted
  - Unified English Braille (UEB) uncontracted
  - UEB contracted
- Students who require the closed-captioned material to be presented as a transcript will see the test in the closed-captioning in a single text presentation on screen.
Braille

Additional Resources:
- Subsection in this manual—Testing Students Requiring Braille

Approved Assessment(s):
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAST
- CSA (This resource is available in Spanish.)
- Summative ELPAC (online assessments)

Description:
Students with visual impairment may use a raised-dot code that individuals read with the fingertips.

- Graphic material (e.g., maps, charts, graphs, diagrams, and illustrations) is presented in a raised format (paper or thermoform).
- Contracted, noncontracted, or both contracted and noncontracted braille are available, depending on the assessment; Nemeth code is available for mathematics.

Use:
Students with visual impairment may read text via braille.

- Tactile overlays and graphics also may be used to assist the student in accessing content through touch.
- Refreshable braille is available only for ELA, CAST, CSA, and ELPAC because Nemeth Code is not available via refreshable braille.
- For mathematics, CAST, and CSA, braille will be presented via embosser; embosser-created braille can be used for ELA and the ELPAC also.
- It is not necessary to request the print-on-demand accommodation when assigning the braille accommodation.
- Alternative text descriptions are embedded in the assessment for all graphics.
- The use of this accommodation may result in the student needing additional overall time to complete the assessment.
Limitations:

Note that when braille has been selected as the test mode, the following resource limitations are in effect:

- ASL videos are not available.
- Text-to-speech is not available.
- Color contrast is forced into black on white.
- Embossing options are displayed.
- Mute System Volume options are displayed (ELA).
- The student testing interface is forced into streamlined mode.
- Masking is disabled.
- Highlighting is disabled.
- Strikethrough is disabled.
- Expandable passage and item options are disabled.
Accessibility Features for the CAASPP and Summative ELPAC | Accommodations

Closed-Captioning

Additional Resources:
- Tutorial—[Embedded Accommodations: Closed Captioning—English](#)
- Tutorial—[Embedded Accommodations: Closed Captioning—Spanish](#)

Approved Assessment(s):
- ✓ Smarter Balanced for ELA (Listening)
- ✓ CAST (This resource is approved for use; however, there are currently no audio questions for the CAST.)
- ✓ CSA (Listening) (This resource is available in Spanish.)
- ✓ Summative ELPAC (online assessments)

Description:
Closed-captioning is printed text that appears on the computer screen as audio materials are presented. This accommodation starts when the student accesses the audio in the test question and does not disappear until the audio passage has reached the end of its play. Closed-captioning does not require additional manual intervention by the student. This feature is shown in [Figure 35](#).

![Figure 35. Closed-captioning](#)

Use:
Students who are deaf or hard of hearing and who typically access information presented via audio by reading words that appear in synchrony with the audio presentation may need this resource to access audio content.
For many students who are deaf or hard of hearing, viewing words (sometimes in combination with reading lips and ASL) is how they access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.

**Text-to-Speech Reading Passages**

**Additional Resources:**
- Web document—[Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5](#)

**Approved Assessment(s):**
- Smarter Balanced for ELA
- CSA
- Summative ELPAC (online assessments; Listening, Speaking, and Writing domains)

**Description:**
Text is read aloud to the student via embedded text-to-speech technology. After selecting the *Speak Passage* option, which is indicated in Figure 36, the student is able to control the speed as well as raise or lower the volume of the voice via a volume control.

**Use:**
This accommodation is appropriate for a very small number of students with a documented need in an IEP or Section 504 plan. Students who use text-to-speech will need headphones unless tested individually in a separate setting.
Non-Embedded

100s Number Table (Mathematics, Grades Four and Above)

Additional Resources:
- Web document—100s Number Table

Approved Assessment(s):
- ✓ Smarter Balanced for Mathematics
- ✓ California Alternate Assessment (CAA) for Mathematics

Description:
The 100s number table is a paper-based table listing numbers from 1–100 available for reference. This accommodation is for use by students in grades four through eight and grade eleven.

Use:
Students with visual processing or spatial perception needs may find this beneficial, as documented in their IEP or Section 504 plan.

Abacus

Approved Assessment(s):
- ✓ Smarter Balanced for Mathematics
- ✓ CAA for Mathematics
- ✓ CAA for Science
- ✓ CAST

Description:
This resource may be used in place of scratch paper for students who typically use an abacus.

Use:
Some students with visual impairment or with documented processing impairments who typically use an abacus may use an abacus in place of using scratch paper.
Additional Instructional Supports and Resources for Alternate Assessments

Additional Resources:


Approved Assessment(s):

- CAA for ELA
- CAA for Mathematics
- CAA for Science

Description:
Eligible pupils shall have any instructional supports, accommodations, or both, including the language of instruction, used in the student’s daily instruction in accordance with the student’s IEP.

Use:
Administration of the CAAs to eligible pupils shall be one-on-one (test examiner to student). Depending upon the student’s disability or needs, the CAAs may or may not include the student’s independent use of the testing interface.

Alternate Response Options

Approved Assessment(s):

- All

Description:
Devices that can be used as an alternate response option include but are not limited to adapted keyboards, large keyboards, Sticky Keys, MouseKeys, FilterKeys, adapted mouse, touch screen, head wand, and switches.

Use:
Students with some physical disabilities (including both fine motor and gross motor skills) may need to use the alternate response options accommodation. Some alternate response options are external devices that must be plugged in and be compatible with the assessment delivery platform. An alternate response option that requires a third-party software to run also requires the permissive mode test setting.
American Sign Language or Manually Coded English

Approved Assessment(s):
✓ Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Some students who are deaf or hard of hearing and who typically use ASL may need this accommodation when accessing text-based content in the assessment.

Use:
What follows are guidelines for use of ASL or Manually Coded English:

• The use of this accommodation may result in the student needing additional overall time to complete the assessment.

• For many students who are deaf or hard of hearing, viewing signs is the only way to access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.

• A student using a non-embedded ASL accommodation responds using ASL, an ASL interpreter would need to be appropriately scribe the response.

Braille

Approved Assessment(s):
✓ Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Students with visual impairment may use a raised-dot code that individuals read with the fingertips. Uncontracted braille test forms are available to students in kindergarten through grade two.

Use:
Students with visual impairment may read text via braille.

• Tactile overlays and graphics also may be used to assist the student in accessing content through touch.

• Alternative text descriptions are embedded in the assessment for all graphics.

• The use of this accommodation may result in the student needing additional overall time to complete the assessment.
Breaks

Approved Assessment(s):
- Summative ELPAC (online assessments)
- Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Breaks may be given during the administration of a domain. Sometimes students are allowed to take breaks when individually needed to reduce cognitive fatigue when they experience heavy assessment demands.

The ELPAC test examiner may need to introduce special administrative considerations to support students needing this resource. The use of this resource may result in the student needing additional overall time to complete the assessment.

Calculator, Mathematics (Grades Six and Above)

Approved Assessment(s):
- Smarter Balanced for Mathematics (grades six through eight and grade eleven)

Description:
A non-embedded calculator may be used by students needing a special calculator, such as a braille calculator or a talking calculator, which is currently unavailable within the assessment platform. This accommodation is for use on calculator-allowed questions only in grades six through eight and grade eleven.

Use:
Students with visual impairment who are unable to use the embedded calculator for calculator-allowed questions will be able to use the calculator that they typically use, such as a braille calculator or a talking calculator. Test administrators should ensure that the calculator is available only for designated calculator questions.

Students who require the use of a non-embedded calculator for all items must have an approved unlisted resource request, because the use of a non-embedded calculator for all items changes the testing construct.
**Large Print**

**Approved Assessment(s):**
- ✓ Summative ELPAC (Writing domain for kindergarten through grade two)

**Description:**
Large-print test forms are available to students in kindergarten through grade two.

**Use:**
Students with visual impairment can use printed large-print Test Books, Answer Books, and examiner manuals.

**Manually Coded English**

**Approved Assessment(s):**
- ✓ Summative ELPAC (Online)

**Description:**
Some students who are deaf or hard of hearing and who typically use Manually Coded English may need this accommodation when accessing text-based content in the assessment.

**Use:**
Some students who are deaf or hard of hearing and who typically use Manually Coded English may need this accommodation when accessing text-based content in the assessment.

- The use of this accommodation may result in the student needing additional overall time to complete the assessment.

- For many students who are deaf or hard of hearing, viewing signs is the only way to access information presented orally. It is important to note, however, that some students who are hard of hearing will be able to listen to information presented orally if provided with appropriate amplification and a setting in which extraneous sounds do not interfere with clear presentation of the audio presentation in a listening test.

- A student using a non-embedded Manually Coded English accommodation responds using Manually Coded English, an interpreter would need to be appropriately scribe the response.
**Multiplication Table, Mathematics (Grades Four and Above)**

**Additional Resources:**
- Web document—Multiplication Table

**Approved Assessment(s):**
- ✔ Smarter Balanced for Mathematics
- ✔ CAA for Mathematics

**Description:**
A paper-based single-digit (1–9) multiplication table is an accommodation for use by students in grades four through eight and grade eleven.

**Use:**
This accommodation is for students with a documented and persistent calculation disability (i.e., dyscalculia).

**Print-on-Demand**

**Approved Assessment(s):**
- ✔ Smarter Balanced for ELA
- ✔ Smarter Balanced for Mathematics
- ✔ CAA for ELA
- ✔ CAA for Mathematics
- ✔ CAA for Science
- ✔ CAST
- ✔ CSA

*The ability to print on demand is available only if the LEA CAASPP coordinator has received permission by contacting the California Technical Assistance Center.*

**Description:**
Paper copies of passages, stimuli, questions, or any combination of these are printed for students.
Use:
Some students with disabilities may need paper copies of passages, stimuli, questions, or any combination of these.

- A very small percentage of students should need this accommodation.
- The use of this accommodation may result in the student needing additional time to complete the assessment.
- It is not necessary to request the print-on-demand accommodation when assigning the braille accommodation.

Read-Aloud Reading Passages

Additional Resources:
- Web document—Read Aloud Guidelines
- Web document—Guidelines for Choosing Text-to-Speech or Read Aloud in Grades 3–5

(Refer also to the non-embedded read-aloud designated support for ELA, mathematics, science, and ELPAC questions.)

Approved Assessment(s):
- Smarter Balanced for ELA
- CAA for ELA
- CSA

Description:
Text is read aloud to the student by a human reader or by a trained and qualified human reader who follows the administration guidelines provided in the Read Aloud Guidelines.

- All or portions of the content may be read aloud.
- Refer to the guidelines for choosing the read-aloud accommodation when deciding if this accommodation is appropriate for a student.

Use:
This accommodation is appropriate for a very small number of students.

- A student should have the option of asking a reader to slow down or repeat text.
- The use of this accommodation may result in the student needing additional time to complete the assessment, the use of a separate setting, or both.
Scribe (Writing)

Additional Resources:
- Web document—Scribing Protocol

(Refer also to the non-embedded scribe designated support for mathematics, science, and nonwriting ELA and CSA.)

Approved Assessment(s):
- Smartere Balanced for ELA (performance task full write)
- CAA for ELA
- Summative ELPAC (online assessments)
- Summative ELPAC (Writing domain for kindergarten through grade two)

Description:
Students dictate their responses to a human who records, verbatim, what they dictate. The scribe must be trained and qualified, and must follow the administration guidelines provided in the Scribing Protocol.

Use:
Students who have documented significant motor or processing difficulties, or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce responses may need to dictate their responses to a human, who then records the students’ responses verbatim.

- The use of this accommodation may result in the student needing overall additional time to complete the assessment.
- For many of these students, dictating to a human scribe is the only way to demonstrate their composition skills.
- It is important that these students be able to develop planning notes via the human scribe, and to view what they produce while composing via dictation to the scribe.
Speech-to-Text

Note: Because permissive mode is compatible with supported desktop operating system versions of macOS and Windows only, speech-to-text is available only with supported desktop operating system versions of macOS and Windows.

Approved Assessment(s):
✓ Smarter Balanced for ELA
✓ Smarter Balanced for Mathematics
✓ CAST
✓ Summative ELPAC (online assessments)

Description:
Voice recognition allows students to use their voices as input devices to the computer, to dictate responses or give commands (e.g., opening application programs, pulling down menus, and saving work).

- Voice recognition software generally can recognize speech up to 160 words per minute.
- Students may use their own assistive technology devices as there is currently no embedded speech-to-text functionality within the test delivery system.

Use:
Students who have motor or processing disabilities (such as dyslexia) or who have had a recent injury (such as a broken hand or arm) that makes it difficult to produce text or commands using computer keys may need alternative ways to work with computers. Students will need to be familiar with the software and should have had many opportunities to use it prior to testing.

Speech-to-text software requires that the student go back through all generated text to correct errors in transcription, including use of writing conventions; thus, prior experience with this accommodation is essential. If students use their own assistive technology devices, all assessment content should be deleted from these devices after the test for security purposes.

For many of these students, using voice recognition software is the only way to demonstrate their composition skills. Still, use of speech-to-text does require that students know writing conventions and that they have the review and editing skills required of students who enter text via the computer keyboard. It is important that students who use speech-to-text also be able to develop planning notes via speech-to-text, and to view what they produce while composing via speech-to-text.
Word Prediction

Note: Word prediction is compatible with supported desktop operating system versions of macOS and Windows only.

Approved Assessment(s):
- Smarter Balanced for ELA
- Smarter Balanced for Mathematics
- CAA for ELA
- CAA for Mathematics
- CAA for Science
- CAST

Description:
Students use non-embedded software that will offer an option for the next word based on word frequency and syntax rules. Students who use word prediction in conjunction with speech output will need headphones unless they are testing individually in a separate setting. Students may need additional time to test.

Use:
The following students may use word prediction:
- Students with documented motor or orthopedic impairments that impair their ability to provide written or typed responses without the use of assistive technology
- Students with moderate to severe learning disabilities that prevent them from recalling, processing, or expressing written language

Students will need to be familiar with the software and should have had many opportunities to use it prior to testing.

Using word prediction software does require that students know writing conventions and that they have the review and editing skills required of students who enter text via the computer keyboard. It is important that students who use word prediction also be able to develop planning notes with or without text-to-speech.

The student’s word prediction solution used must adhere to the following guidelines:
- The software must predict a single word only.
- Phonetic spelling and speech output may be used.
- Functionality that provides phrase prediction, predict ahead, or next word must be disabled prior to testing.
- Expanded dictionaries must be disabled.
Accessibility Features for the CAASPP and Summative ELPAC |
Accommodations

- Students may use their own assistive technology devices. Note the following about student-provided assistive technology devices:
  - Use of this resource may require permissive mode to be enabled.
  - If the device has additional features that may compromise test security (such as internet access), the functionality should be disabled before testing.
  - All assessment content must be removed after testing to protect the security and integrity of the assessments.
Chapter 3. Configuring Selected System and Third-Party Accessibility Resources
Literary Assistance Resources

Text-to-Speech

This section contains information about text-to-speech (TTS) requirements. TTS reads aloud text that appears on the screen for students who may have reading impairments. The test delivery system includes embedded TTS that can be turned on for students after the appropriate accessibility settings in the Test Operations Management System (TOMS) have been assigned. For students to test with TTS, a supported voice pack will need to be installed on their device before testing begins. Students testing with TTS should also have a supported headset or headphones.

Supported Voice Packs

Using text-to-speech requires at least one voice pack to be installed on testing devices. A number of voice packs are available for testing devices, and all voice packs are researched and tested for compatibility with the secure browsers. Additionally, not all voice packs that come preinstalled with operating systems are approved for use with online testing.

What follows is a list of the voice packs supported for students testing with TTS. A student who needs to use a voice pack not listed in this table should test it with a practice test to ensure there are no issues before its use an operational assessment. The student using TTS for the practice test must log on using a supported secure browser. The student can also verify that TTS works on the testing device by logging on to a practice test session and selecting a test for which TTS is available.

- Windows built-in voice packs
- Mac built-in voice packs
- iOS built-in voice packs
- Android built-in voice packs
- Chromebook built-in voice packs
- NeoSpeech™ Julie voice pack (available for download in TOMS until May 29, 2020)
- NeoSpeech™ Violeta voice pack (available for download in TOMS until May 29, 2020)

Note: Text-to-speech tracking does not function correctly on the Linux operating system. If students require the use of this accommodation (TTS with tracking), they must use a different operating system.
Overview of Text-to-Speech

Using Text-to-Speech
After configuration of text-to-speech, the student or teacher may test the functionality on a practice test administered through a supported secure browser before using it for operational testing. Students or teachers can also verify that text-to-speech works on testing devices by logging on to a practice test session and selecting a test for which text-to-speech is available.

Notes:

- Test sites are strongly encouraged to test the text-to-speech settings before students take operational tests. Check these settings through the diagnostic page. From the practice test logon screen, select the [Run Diagnostics] link, select the [TTS Check] button, and then follow the instructions on the page.
- Text-to-speech includes a feature that allows students to pause and then resume text-to-speech in the middle of a passage. The pause feature does not work on mobile devices. Consequently, consider testing students who require text-to-speech on desktop or laptop computers.
- While the secure browser recognizes voice packs that ship out of the box for Android and Chrome OS devices for playback and stop, the pause feature does not work properly on these devices. Consider testing students who need text-to-speech on desktops or laptops running Windows or Mac, or on iPads.

How the Secure Browser Selects Voice Packs
This subsection describes how the secure browsers select which voice pack to use.

Voice Pack Selection on Desktop Versions of Secure Browsers
When a student who is using text-to-speech starts a test, the secure browser looks for voice packs on the student’s device. Upon recognizing an approved voice pack, the secure browser uses the one with the highest priority.

If any of the approved voice packs has also been set as the default voice on the device, then that voice pack will always get the highest priority.
Voice Pack Selection on Mobile Versions of Secure Browsers

The mobile secure browser uses either the device’s native voice pack or a voice pack embedded in the secure browser. Additional voice packs downloaded to a mobile device are not recognized by the mobile secure browser.

About ReadSpeaker (NeoSpeech) Voice Packs for Windows

Notes:

- This software is available for download by users with TOMS access.
- The software license for the Julie and Violeta voice packs expires permanently on May 29, 2020.

Pursuant to an agreement between ReadSpeaker (formerly NeoSpeech) and the American Institutes for Research (the subcontractor providing the online testing systems), authorized users may download and install specific licensed ReadSpeaker voice packs for use on supported Windows devices (Windows 7, 8.0, 8.1, and 10).

These voice packs can be used instead of the default Windows voice packs for English and the commercial Spanish voice packs from Cepstral. (The default Windows voice packs as well as the Cepstral voice packs for Windows may still be used for text-to-speech, if desired.)

- The Julie voice pack is for English text-to-speech users.
- The Violeta voice pack is for Spanish text-to-speech users.

The ReadSpeaker voice pack is to be used only in conjunction with, and not separate from, the online assessments provided by the test delivery system. The ReadSpeaker voice packs and the NeoSpeech Voice Packs Installation Guide can be downloaded from TOMS.

Configuring Windows Text-to-Speech Settings

Additional Resources in this Subsection:

- Secure Browsers web page—https://ca.browsers.airast.org

This subsection explains how to configure Windows for using text-to-speech with the secure browser. The text-to-speech feature is available on Windows versions as listed on the Secure Browsers web page. Windows devices are typically shipped with at least one default voice pack. Many of these default voice packs are recognized by the secure browser.

The instructions in this section are for Windows 10. The process is similar for other versions of Windows.
1. Open the speech recognition tool in the Control Panel by navigating to the Control Panel and then selecting the [Speech Recognition] link (Figure 37).

![Figure 37. Windows Control Panel sample](image)

2. In the Configure your Speech Recognition experience window, select the [Text to Speech] link (Figure 38).

![Figure 38. Configure your Speech Recognition experience window](image)

3. In the Speech Properties interface, select the [Text to Speech] tab to configure default text-to-speech preferences (Figure 39).
   a. Voice selection: If multiple voice packs are available, select the default voice.
   b. Select the [Preview Voice] button to hear a sample of the voice and determine whether the selected voice requires a rate adjustment.
   c. Voice speed: If necessary, adjust the voice speed. Drag the slider to make the voice speak slower or faster. To listen to the rate, select the [Audio Output] button.
4. Once all options have been selected, select the [OK] button to save the settings and close the Speech Properties window.
Configuring OS X Text-to-Speech Settings

This section explains how to configure Mac OS X for using text-to-speech with the secure browser. The text-to-speech feature is available on OS X versions as listed in the System Requirements document. Using Table 3 as a reference, install voice packs from the indicated packages—these are the supported voice packs.

Table 3. Voice Packs Recognized by Secure Browsers—OS X

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Voice Pack</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac (preinstalled)</td>
<td>Agnes</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Alex</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Bruce</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Callie</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>David</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Fred</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Jill</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Junior</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Kathy</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Princess</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Ralph</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Samantha</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Tom</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Vicki</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Victoria</td>
<td>English</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Diego</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Javier</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Marta</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Monica</td>
<td>Spanish</td>
</tr>
<tr>
<td>Mac (preinstalled)</td>
<td>Paulina</td>
<td>Spanish</td>
</tr>
<tr>
<td>Infovox (commercial)</td>
<td>Heather Infovox iVox HQ</td>
<td>English</td>
</tr>
<tr>
<td>Infovox (commercial)</td>
<td>Rosa Infovox iVox HQ</td>
<td>Spanish</td>
</tr>
</tbody>
</table>

Mac OS X devices are typically shipped with at least one default voice pack. Many of these default voice packs are recognized by the secure browser.
The instructions in this section are for OS X 10.9. The process is similar for other versions of OS X.

1. Choose the Apple menu → **System Preferences** (Figure 40).

![Figure 40. Select OS X System Preferences](image)

2. Select the [Dictation & Speech] icon (indicated in Figure 41).

![Figure 41. OS X System Preferences](image)
3. In the *Text to Speech* section of the *Dictation & Speech* configuration window (Figure 42), set the default text-to-speech preferences.
   a. **System Voice:** If multiple voice packs are available, select the default voice.
   b. Select the [Play] button to hear a sample of the voice and determine whether the selected voice requires a rate adjustment.
   c. **Speaking Rate:** If necessary, adjust the voice speed. Drag the slider to make the voice speak slower (left) or faster (right). To listen to the rate, select [Play].
   d. When configuration is complete, select the red X or bubble in the upper-left corner to save the settings, and then close the *Dictation & Speech* window.

![Dictation & Speech configuration window](image)

**Figure 42.** OS X Dictation & Speech options

**Disabling the Text-to-Speech Keyboard Shortcut**

A feature in macOS 10.12 and later allows users to have any text on the screen read aloud by selecting the text and pressing a preset key or set of keys on the keyboard. By default, this feature is disabled and must remain disabled so as not to compromise test security. Take the following steps to toggle this feature.

1. From the *Apple* menu, select *System Preferences*. 
Configuring Selected System and Third-Party Accessibility Resources | Literary Assistance Resources

2. Select the [Accessibility] button on the System Preferences screen, which is indicated in Figure 43.

![System Preferences Screen](image)

**Figure 43. OS X System Preferences screen.**

3. Select the [Speech] button.

4. To enable this feature, check the **Speak selected text when the key is pressed** box. To disable, unselect the checkbox.

**Configuring Linux Text-to-Speech Settings**

This section explains how to install voice packs on the supported Linux distributions. Using Table 4 and Table 5 as references, install voice packs from the indicated packages—these are the supported voice packs.

**Table 4. Packages That Include Supported Voice Packs on Linux Distributions—Ubuntu**

<table>
<thead>
<tr>
<th>Distribution/Voice Pack</th>
<th>Available in Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>kal_diphone (Kevin American English male)</td>
<td>festvox-kallpc16k, festvox-kallpc8k</td>
</tr>
<tr>
<td>ked_diphone (Kurt American English male)</td>
<td>festvox-kdlpc16k, festvox-kdlpc8k</td>
</tr>
<tr>
<td>el_diphone (Castilian Spanish male)</td>
<td>festvox-ellpc11k</td>
</tr>
</tbody>
</table>
Table 5. Packages That Include Supported Voice Packs on Linux Distributions—Fedora

<table>
<thead>
<tr>
<th>Distribution/Voice Pack</th>
<th>Available in Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>cmu_us_awb_arctic_hts (Scottish English male)</td>
<td>festvox-awb-arctic-hts</td>
</tr>
<tr>
<td>cmu_us_bdl_arctic_hts (American English male)</td>
<td>festvox-bdl-arctic-hts</td>
</tr>
<tr>
<td>cmu_us_jmk_arctic_hts (Canadian English male)</td>
<td>festvox-jmk-arctic-hts</td>
</tr>
<tr>
<td>kal_diphone (Kevin American English male)</td>
<td>festvox-kal-diphone</td>
</tr>
<tr>
<td>ked_diphone (Kurt American English male)</td>
<td>festvox-ked-diphone</td>
</tr>
</tbody>
</table>

1. Install Festival for text-to-speech:
   - **Ubuntu:** `sudo apt-get install festival`
   - **Fedora:** `yum install festival`

2. Install Sound eXchange (SoX) for text-to-speech:
   - **Ubuntu:** `sudo apt-get install sox`
   - **Fedora:** `yum install sox`

**Speech-to-Text**

**Resources in This Section:**
- Apple Use Dictation on your iPhone, iPad, or iPod touch web page—https://support.apple.com/en-us/HT208343
Configuring Selected System and Third-Party Accessibility Resources

Literary Assistance Resources


Advisory: While the products listed in Table 6 have been tested by the American Institutes for Research (AIR) for use with the secure browser and test delivery system, a product’s inclusion in this section does not imply recommendation by the California Department of Education (CDE), Educational Testing Service (ETS), or AIR. It is the local educational agency’s (LEA’s) responsibility to determine if a product is appropriate for a student, monitor students during testing, and comply with the LEA’s software and security policies.

Speech-to-text technology transcribes a student’s spoken words into text for responses to test questions in the test delivery system. Students with the appropriate accommodations may use speech-to-text assistive technology while taking tests. The test delivery system currently supports several non-embedded speech-to-text applications.

After configuration of a speech-to-text application, the student may test that application on a practice test administered through a supported secure browser prior to using it for operational testing.

Alert: Users should verify the security and privacy policies of any third-party software before deciding to use that software, because many speech-to-text providers send a student’s audio recording to the cloud for processing by default. Users should have a clear understanding of what third-party providers do and do not do with student information and should disable features that might compromise the security of test data.
Table 6 lists speech-to-text applications that have been tested with the test delivery system. Note that currently, there is no embedded speech-to-text feature within the test delivery system, and speech-to-text is not available for Linux, Android, or Chrome OS.

### Table 6. Third-party Speech-to-Text Applications

<table>
<thead>
<tr>
<th>Speech-to-Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Dragon NaturallySpeaking  | • 15 Professional | • Windows 7 SP1  
• Windows 8.1  
• Windows 10  
• Windows Server 2008 R2  
• Windows Server 2012 R2 | • This resource may need to be used in a separate setting.  
• This software requires additional setup before use in the test delivery system; refer to the configuration guidelines for additional information.  
• Because the test delivery system cannot confirm appropriate configurations are in use during testing, the test administrator or test examiner will need to ensure the student does not use features outside of the speech-to-text functionality. |
| iOS Dictation             | • iOS 11.4  
• iOS 12.2  
• iOS 12.3  
• iOS 12.4 | • iOS 11.4  
• iOS 12.2  
• iOS 12.3  
• iOS 12.4 | • This built-in software cannot be used with the secure browser.  
• The student must dictate into a secondary iPad set in Airplane Mode. The test administrator or test examiner enters the student’s response into the testing device.  
• Refer to the configuration guidelines for additional information. |
Table 6 (continuation one)

<table>
<thead>
<tr>
<th>Speech-to-Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac Enhanced Dictation</td>
<td>• 8.0</td>
<td>• Mac 10.9–10.14</td>
<td>• This built-in software requires additional setup before use in the test delivery system; refer to the <a href="#">configuration guidelines</a> for additional information.</td>
</tr>
<tr>
<td>Read&amp;Write</td>
<td>• 12.0.45</td>
<td>• Windows 7 SP1</td>
<td>• Students have access to Screenshot Reader, PDF Reader, Audio Maker, Text Prediction, and Scan features while testing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 8.0</td>
<td>• Exam Mode must be enabled before the student begins testing; refer to the <a href="#">configuration guidelines</a> for additional information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 8.1</td>
<td>• This mode is not available with Read&amp;Write for Mac.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2016 R2</td>
<td></td>
</tr>
</tbody>
</table>
Table 6 (continuation two)

<table>
<thead>
<tr>
<th>Speech-to-Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Speech Recognition (for Windows 7 and 8 and version 10)</td>
<td>8.0</td>
<td>• Windows 7 SP1</td>
<td>• This built-in software requires additional setup before use in the test delivery system; refer to the configuration guidelines for additional information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 8.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 8.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2016 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Because the test delivery system cannot confirm appropriate configurations are in use during testing, the test administrator or test examiner will need to ensure the student does not use features outside of the speech-to-text functionality.</td>
</tr>
</tbody>
</table>
Table 6 (continuation three)

<table>
<thead>
<tr>
<th>Speech-to-Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>WordQ SpeakQ</td>
<td>5.1.20</td>
<td>Windows 7 SP1</td>
<td>This software requires additional setup before use in the test delivery system; refer to the configuration guidelines for additional information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows 8.0</td>
<td>Exam Mode must be enabled before the student begins testing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows 10</td>
<td>This application also includes a text prediction feature that cannot be disabled. Therefore, a student’s IEP or Section 504 Plan must include the use of the word prediction resource to be used along with the speech-to-text functionality to use this application.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows Server 2012 R2</td>
<td>This application cannot read some mathematics characters and table content.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows Server 2016 R2</td>
<td></td>
</tr>
</tbody>
</table>

Configuration Guidelines for Speech-to-Text Applications

Some applications listed in Table 6 require additional configuration to prepare for use during online testing. Necessary configurations are described in this subsection. Some applications send data to the cloud for processing by default. Where noted, this feature should be disabled to ensure the security of test data.

After an application is configured, AIR strongly recommends testing that application on a practice test administered through the secure browser prior to using it for operational testing.
Dragon NaturallySpeaking 15 Home or Professional Individual for Windows

Take the following steps to configure Dragon NaturallySpeaking for student testing:

1. Open the *Options* dialog box presented in Figure 44 by accessing the *Tools* drop-down list on the DragonBar and then selecting the *Options* item.

   ![Figure 44. Dragon [Commands] tab in the Options dialog box](image)

2. On the [Commands] tab, displayed in Figure 44, uncheck the following boxes:
   - *Enable E-Mail and Calendar commands*
   - *Enable Cut shortcut commands*
   - *Enable launching from the Start menu*
   - *Enable launching from the desktop*
3. On the [Miscellaneous] tab (Figure 45), uncheck the *Use the Dictation Box for unsupported applications* box.

![Figure 45. Dragon [Miscellaneous] tab in the Options dialog box](Image)

4. Open the *Administrative Settings* dialog box presented in Figure 46 by accessing the *Tools* drop-down list on the DragonBar and then selecting the *Administrative Settings* item.

![Figure 46. Dragon [Scheduled Tasks] tab in the Administrative Settings dialog box](Image)

5. On the [Scheduled Tasks] tab, uncheck the *Enable scheduled Data Collection* box.
**iOS Dictation**

Because of the way iPads are secured for high-stakes assessments, there is currently no third-party application that can provide speech-to-text. However, students who need speech-to-text can dictate into the built-in dictation application on a secondary iPad and a test administrator or test examiner can then enter the student’s response, verbatim, into the testing device.

The secondary iPad must be a 5th or 6th Generation iPad or iPad Pro running at least iOS 9. It must be placed in Airplane Mode so that no secure test data is transmitted to the cloud for processing. Also, it must be opted out of Apple’s Diagnostic and Usage program so that no secure test data is stored on the device for analysis.

What follows are the key settings for using the iOS Dictation resource:

- Dictation—Enable through an app’s settings using General \rightarrow Keyboard Settings
- Airplane Mode—Enable through Settings \rightarrow Airplane Mode
- Diagnostics & Usage opt-out—Disable through Settings \rightarrow Privacy \rightarrow Analytics

Prior to the day of testing, the secondary iPad must be connected to the internet once to download the offline models that allow speech to be transcribed offline. This is done automatically once Dictation is enabled and the device is connected to the internet. No manual download is necessary.

After the device is connected to the internet once, AIR recommends users test offline dictation by enabling Airplane Mode and dictating into the Notes app or another similar app on the iPad. If it works, testing may proceed. If it does not work, disable Airplane Mode and reconnect the iPad to the internet to finish downloading the offline speech-to-text models.

On testing day, enable Airplane Mode on the secondary iPad and allow the student to dictate responses into it. A test administrator or test examiner must then enter the responses, verbatim, into the student’s testing device.

After testing is completed, be sure to delete any secure test data on the secondary iPad.

**Mac Enhanced Dictation**

Mac workstations that will be used for dictation should be opted out of Apple’s Diagnostic and Usage program so that no secure test data is stored on the device for analysis. Macs can be opted out of this program by disabling Analytics using Apple menu \rightarrow System Preferences \rightarrow Security & Privacy \rightarrow Analytics and unchecking the Share iCloud Analytics box.

When Enhanced Dictation is enabled on a testing device, a language and keyboard shortcut must also be enabled through the device’s keyboard settings. Take the following steps to enable keyboard dictation:

1. Select Apple menu \rightarrow System Preferences.
2. Select the [Keyboard] icon.
3. Select the [Dictation] tab.
4. If asked about improving Siri and Dictation, select the [Not Now] button to decline to share audio recordings.

5. Select a language to use from the Language drop-down list.

Once Enhanced Dictation is enabled, the device must be connected to the internet to download the offline models that allow speech to be transcribed without sending it to the cloud for processing.

**Read&Write for Windows**

Read&Write has an Exam mode that can be used to turn off features for a single student on the particular testing device. When Exam mode is enabled, the student will have access to only the selected features on the toolbar and certain speech settings, including voice selection, speed, pitch and Speak As I Type (the full settings menu will not be accessible).

Take these steps to use Exam mode; refer also to the Using Exam Mode in Read&Write for Windows web page.

1. Run Read&Write as the student who is testing.
2. Select the [Settings] button.
3. Select the [Show more settings] link.
4. Type adminsettings in the Find a Setting field.
5. Enter and confirm a password to grant administrator access on this computer; select the [OK] button.
6. Select the [Select your features] tab and select which feature(s) to enable on the student’s toolbar.
7. Select the Use Exam Mode now toggle to start Exam mode.
8. Close the Read&Write menu to start the exam.

**Windows Speech Recognition**

**Alert:** Users should prevent the device from sending data to Microsoft so that test data is not sent to the cloud by unchecking the Review documents and mail to improve accuracy box when setting up.

Prior to testing day, the Windows built-in Speech Recognition application must be set up on each testing device that will be used by students who require speech-to-text. The application can be set up by selecting Speech Recognition in the Windows Control Panel. During setup, Speech Recognition Voice Training must be completed by the student for optimal performance.
On the day of testing, the student should launch the secure browser (with permissive mode enabled), enter the test, and then launch the Windows Speech Recognition software. This will allow the secure browser to recognize the software and permit students to proceed through the test.

**WordQ SpeakQ**

To minimize security risks, WordQ SpeakQ includes an Exam Mode feature, which can be enabled through the application's settings. Note the following about Exam mode:

- It must be set for a minimum of 1 hour and a maximum of 12 hours.
- Exam Mode may not eliminate all security risks.
- Once Exam Mode has been set, it cannot be disabled until the configured time has run out.

Take the following steps to turn on Exam Mode and set the timer:

1. Open WordQ SpeakQ.
2. Select the [Options] icon.
3. Select [Exam Mode]; the EXAM MODE pop-up window appears.
4. Set the exam time limit in the Exam Mode time limit field at the bottom of the window.
5. Check or uncheck the Word usage examples and Single words added by the user, including topic words boxes to enable or restrict these features.

**Word Prediction**

**Resources in This Section:**

- Quillsoft WordQ 5 web page—https://www.quillsoft.ca/wordq5

**Advisory:** While the products listed in Table 7 have been tested by AIR for use with the secure browser and test delivery system, a product’s inclusion in this section does not imply recommendation by the CDE, ETS, or AIR. **It is the LEA’s responsibility to determine if a product is appropriate for a student, monitor students during testing, and comply with the LEA’s software and security policies.**
Word prediction applications, which use predictive text technology, suggest words as a student types responses for test items. Currently, the test delivery system does not offer an embedded word prediction feature but supports several third-party tools that use predictive text technology.

Word prediction is compatible with supported desktop operating system versions of macOS and Windows only.

Table 7 lists word prediction applications that have been tested with the test delivery system.

### Table 7. Third-party Word Prediction Applications

<table>
<thead>
<tr>
<th>Predictive Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co:Writer Universal</strong></td>
<td>1.0.0</td>
<td>- Windows 7 SP1</td>
<td>- Because the test delivery system cannot confirm appropriate configurations are in use during testing, the test administrator or test examiner will need to ensure the student does not use features outside of the word prediction functionality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 8.0</td>
<td>- This software requires users to enter numbers from an on-screen keypad.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 8.1</td>
<td>- The OS X version cannot be opened or minimized with keyboard commands.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows Server 2016 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mac 10.9–10.14</td>
<td></td>
</tr>
<tr>
<td><strong>WordQ 5</strong></td>
<td>5.0.40</td>
<td>- Windows 7 SP1</td>
<td>- This software requires additional setup before use in the test delivery system; refer to the configuration guidelines for additional information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 8.0</td>
<td>- Exam mode must be enabled before the student begins testing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 8.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Windows Server 2016 R2</td>
<td></td>
</tr>
</tbody>
</table>
Table 7 (continuation)

<table>
<thead>
<tr>
<th>Predictive Text Technology</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Read&Write for Mac         | 7.1            | Mac 10.10–10.14 | • Students have access to Screenshot Reader, PDF Reader, Audio Maker, and Scan features while testing.  
• Because the test delivery system cannot confirm appropriate configurations are in use during testing, the test administrator or test examiner will need to ensure the student does not use features outside of the word prediction functionality. |

Configuration Guidelines for Word Prediction Applications

WordQ 5
To minimize security risks, WordQ 5 includes an Exam Mode feature, which can be enabled through the application’s settings. Note the following about Exam mode:

• It must be set for a minimum of 1 hour and a maximum of 12 hours.
• Exam Mode may not eliminate all security risks.
• Once Exam Mode has been set, it cannot be disabled until the configured time has run out or the device has been rebooted.

Take the following steps to turn on Exam Mode and set the timer:

1. Open WordQ 5.
2. Select the [Options] icon
3. Select [Exam Mode]; the EXAM MODE pop-up window appears.
4. Set the exam time limit in the Exam Mode time limit field at the bottom of the window.
5. Check or uncheck the Word usage examples and Single words added by the user, including topic words boxes to enable or restrict these features.
Presentation Resources

Audio Transcripts (Includes Braille)

Content that is accessed through listening while accessing the English language arts/literacy listening passages with the option of closed-captions is made available in refreshable braille or on-screen as a single text presentation called Audio Transcript.

Students who are presented with this accommodation on-screen select the [Transcripts] icon to open a pop-up box that contains a transcript of what is otherwise presented via closed-captions.

Students who require a braille transcript select the [Print Passage] icon; the test administrator or test examiner approves the request and prints the braille transcript. Note that students also must have the braille embedded accommodation set to print transcripts in braille.
Integration with Assistive Technology

This section provides an overview of the embedded and non-embedded assistive technology tools that can be used to help students with accessibility needs complete online tests in the test delivery system.

Students who use assistive technologies with a standard web browser should be able to use those same technologies with the test delivery system. The best way to test compatibility with assistive technologies is to take a practice test with those technologies turned on. If they do not work, refer to the additional configuration instructions in this manual as required.

Permissive Mode

Resources in This Subsection:


Permissive mode is a setting that allows students to use non-embedded assistive technology to complete tests in the secure browser. When permissive mode is turned on, the secure browser’s security settings will be partially lowered to allow students to use tools that would otherwise be blocked.

Permissive mode activates when the student is approved for testing. Students who have the permissive mode setting enabled should not continue with the sign-in process until the accessibility software is configured correctly.

Permissive mode is available only for computers running supported desktop Windows and Mac operating systems. When using Windows 8 and above, the task bar remains on-screen throughout the test after enabling accessibility software. However, forbidden applications are still prohibited.

When permissive mode is turned on, standard keyboard navigation in the secure browser is disabled to accommodate any potential keyboard commands associated with the assistive technology the student may be using. When permissive mode is turned off, the secure browser reoccupies the whole screen, and the student’s ability to use assistive technologies or switch between any other applications and the secure browser is suppressed.
Testing Using Permissive Mode

To use accessibility software with the secure browser:

1. Open the required accessibility software.

2. Open the secure browser. Begin the normal sign-in process up to the test administrator or test examiner approval step.

3. When a student is approved for testing, the secure browser allows the operating system’s menu and taskbar to appear. If the taskbar is not visible, turn off the auto hide feature.
   a. Windows 7, 8, and 8.1: Right-click the taskbar, select Properties, and uncheck the Auto-hide the taskbar checkbox. The student can then press [Alt] + [Tab] to switch between the secure browser and the permitted accessibility application(s).
   b. Windows 10: Right-click the taskbar, select Taskbar settings, and toggle the Automatically hide the taskbar in desktop mode to “Off.” The student can then press [Alt] + [Tab] to switch between the secure browser and the permitted accessibility application(s).
   c. Mac OS: The secure browser resizes and students can view the dock in its usual position inside the test. If the dock is set to auto hide, no resizing occurs, and the dock is visible only when the mouse moves toward the bottom of screen. Students can press [Cmd] + [Tab] to switch between the secure browser and the permitted accessibility application(s).

4. The student must immediately switch to the accessibility software that is already open on the device so that it appears over the secure browser. The student cannot select (click) within the secure browser until the accessibility software is configured.

   • Windows: To switch to the accessibility software application, select the application in the task bar.

   • Mac OS: To switch to the accessibility software application, select the application in the dock.

5. The student configures the accessibility software settings as needed.

6. After configuring the accessibility software settings, the student returns to the secure browser. At this point, the student can no longer switch back to the accessibility software. If changes need to be made, the student must sign out, make the changes, and then sign in again.

Note: When using Windows 8 and above, the task bar remains on-screen throughout the test after enabling accessibility software. However, forbidden applications are still prohibited.
7. The student continues with the sign-in process.

**Notes:**

- Permissive mode is available only for devices running supported desktop Windows and Mac operating systems. For information about supported operating systems, refer to the [CAASPP and ELPAC Technical Specifications and Configuration Guide for Online Testing](#).
- Accessibility software must be certified for use with the test delivery application.
- Forbidden applications still will not be allowed to run.
- Permissive mode will not allow applications, such as those using cloud-based technologies, to connect to the internet.
Alternative Computer Input Technology

Resources in This Section:

- AbleNet Specs Switch web page, “Specifications” section—
  https://www.ablenetinc.com/technology/switches/specs-switch#Specifications
- Origin Instruments HeadMouse Nano web page—
  https://www.orin.com/access/headmouse/
- Origin Instruments Swifty USB Switch Interface web page—
  https://www.orin.com/access/swifty/
- Smartbox Assistive Technology Dwell Clicker 2 web page—
  https://thinksmartbox.com/product/dwell-clicker/
- Tobii Dynavox PCEye Mini web page—

Alternative computer input (ACI) assistive tools allow students with physical impairments to interact with a computer without using a traditional mouse and keyboard setup. For instance, ACI technology such as PCEye Mini tracks students’ eye movement, while Dwell Clicker 2 allows students to use a mouse without having to press the left or right mouse buttons.

The test delivery system does not include any embedded alternative computer input tools, but it supports several third-party alternative computer input technologies. Refer to a product’s user manual or web page for detailed instructions on configuration and use.

After configuration of an ACI device, the student may test it on a practice test administered through a supported secure browser prior to using it for operational testing.
Table 8 provides a list of third-party ACI devices that can be used in the test delivery system. While this list includes only the devices that AIR has tested thoroughly with the secure browser, there may be additional supported ACI devices that have not yet been tested.

<table>
<thead>
<tr>
<th>ACI Product</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| PCEye Mini with Windows Control | N/A            | • Windows 7 SP1  
• Windows 8.1  
• Windows 10            | • This technology requires additional setup before use in the test delivery system (refer to configuration instructions) |
| Dwell Clicker 2              | 2.0.40         | • Windows 7 SP1  
• Windows 8.0  
• Windows 10  
• Windows Server 2012 R2  
• Windows Server 2016 R2     | • This technology requires additional setup before use in the test delivery system (refer to configuration instructions) |
| Headmouse Nano               | N/A            | • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows 10  
• Windows Server 2012 R2  
• Windows Server 2016 R2  
• Mac 10.9–10.14           | • This technology requires additional setup before use in the test delivery system (refer to configuration instructions) |
Table 8 (continuation)

<table>
<thead>
<tr>
<th>ACI Product</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specs Switch</td>
<td>N/A</td>
<td>• Windows 7 SP1&lt;br&gt;• Windows 8.0&lt;br&gt;• Windows 8.1&lt;br&gt;• Windows 10&lt;br&gt;• Windows Server 2012 R2&lt;br&gt;• Windows Server 2016 R2&lt;br&gt;• Mac 10.9–10.14</td>
<td>N/A</td>
</tr>
<tr>
<td>Swifty</td>
<td>SW2</td>
<td>• Windows 7 SP1&lt;br&gt;• Windows 8.0&lt;br&gt;• Windows 8.1&lt;br&gt;• Windows 10&lt;br&gt;• Windows Server 2012 R2&lt;br&gt;• Windows Server 2016 R2&lt;br&gt;• Mac 10.9–10.14</td>
<td>• This technology requires additional setup before use in the test delivery system (refer to configuration instructions)</td>
</tr>
</tbody>
</table>

**Configuring PC Eye Mini with Windows Control on Student Devices**

To configure the PC Eye Mini, it should be plugged in to a computer that uses Windows Control software and installed by following the product’s installation instructions.

For students using PC Eye Mini with Windows Control Software, the Word Prediction feature should be disabled by opening the application and navigating to **Settings → Keyboard**.

**Configuring Dwell Clicker 2**

Take the following steps to configure Dwell Clicker 2 settings:

1. Open the application.
4. In the window that pops up, make sure the *Use Text Prediction* checkbox is not checked.
Configuring Headmouse Nano

Take the following steps to configure Headmouse Nano when using the SofType keyboard:

1. Open the SofType application.
2. Select View → Word Bar from the menu.
3. Make sure the Prediction radio button is not selected.

Configuring Swifty: SW2

To configure Swifty Switch Access according to the student’s needs, the dual in-line package (DIP) switches listed in Table 9 should be set when using Switch. After modifying DIP switch settings, unplug and replug Swifty to activate the settings.

<table>
<thead>
<tr>
<th>Switch 1</th>
<th>Switch 2</th>
<th>USB Device</th>
<th>Interface Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>ON</td>
<td>Mouse</td>
<td>Left, Right, Middle</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>Joystick</td>
<td>Btn1, Btn2, Btn3</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>Keyboard (For iPad)</td>
<td>Enter, Space, Tab</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>Keyboard</td>
<td>1,2,3</td>
</tr>
</tbody>
</table>

Assistive Keyboard and Mouse Input Technology

Resources in This Section:

- Ablenet Keys-U-See Keyboard web page—https://www.ablenetinc.com/keys-u-see-keyboard

Assistive keyboard and mouse input tools provide additional support to students with physical impairments who need to use a keyboard and mouse in order to respond to test items. These include keyboards with larger keys, computer mice with trackballs, and other tools that facilitate access for students with limited movement abilities.

The test delivery system does not include any embedded assistive keyboard and mouse input tools, as these tools typically involve the use of special hardware. However, the test delivery system does support several third-party assistive keyboard and mouse input tools.
Table 10 provides a list of third-party assistive keyboard and mouse input tools that can be used to test. If a student needs to use a device not listed here, the student may test it with a practice test prior to using it for operational testing.

Table 10. Third-Party Assistive Keyboard and Mouse Input Technology

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
<th>OS Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keys-U-See Keyboard</td>
<td>N/A</td>
<td>Windows 7 SP1, Windows 8.0, Windows 10, Windows Server 2012 R2, Windows Server 2016 R2</td>
</tr>
<tr>
<td>BigTrack2 Trackball</td>
<td>N/A</td>
<td>Windows 7 SP1, Windows 8.0, Windows 8.1, Windows 10, Windows Server 2012 R2, Windows Server 2016 R2, Mac 10.9–10.15</td>
</tr>
</tbody>
</table>
Visual Assistance Resources

Screen Magnifier Technology

Resources in This Section:

- Configuring Zoom Text Demonstration video—
- Freedom Scientific Fusion web page—
  https://www.freedomscientific.com/products/software/fusion/
- Freedom Scientific MAGic web page—
  https://www.freedomscientific.com/products/software/magic/
- Freedom Scientific ZoomText Magnifier/Reader web page—
  https://www.zoomtext.com/products/zoomtext-magnifierreader/

Advisory: While the products listed in Table 11 have been tested by the American Institutes for Research (AIR) for use with the secure browser and test delivery system, a product’s inclusion in this section does not imply recommendation by the California Department of Education, Educational Testing Service, or AIR. It is the local educational agency’s (LEA’s) responsibility to determine if a product is appropriate for a student, monitor students during testing, and comply with the LEA’s software and security policies.

Screen magnifier assistive technology enlarges the content displayed on a device’s screen to assist students with visual impairment. Although the test delivery system supports some non-embedded screen magnifier tools from third parties, AIR strongly recommends students use the zoom tools embedded in the test delivery system. These embedded tools were designed to magnify test content in the most intuitive and user-friendly manner for students. Embedded zoom tools can also be tracked when gathering data about students’ tool use. Refer to the Configuring Zoom Text Demonstration video for additional information.

The embedded zoom tools in the secure browser allow students to magnify test content to the following levels:

- 1×
- 1.5×
- 1.75×
- 2.5×
- 3×
- 5×
- 10×
- 15×
- 20×
Configuring Selected System and Third-Party Accessibility Resources | Visual Assistance Resources

**Note:** Any zoom levels of 5× and greater require the streamlined mode test setting, which will arrange test content vertically in the test delivery system.

Table 11 provides a list of third-party screen magnifier tools that can be used in the test delivery system. The non-embedded screen magnifier tools listed in this table come with an increased risk of interoperability issues, require students to manually pan the magnification tool across the screen, and can include unwanted features that should not be used while testing. These non-embedded tools also cannot be tracked by the California Assessment of Student Performance and Progress or English Language Proficiency Assessments for California programs when gathering data about students’ tool use.

<table>
<thead>
<tr>
<th>Screen Magnifier</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion Professional</td>
<td>• 2019</td>
<td>• Windows 7 SP1</td>
<td>• This software requires additional setup before use with the test delivery system (refer to the configuration instructions for JAWS).</td>
</tr>
<tr>
<td></td>
<td>• 2020</td>
<td>• Windows 8.1</td>
<td>• Fusion combines the JAWS screen reader with ZoomText.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2016 R2</td>
<td></td>
</tr>
</tbody>
</table>
### Table 11 (continuation)

<table>
<thead>
<tr>
<th>Screen Magnifier</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAGic Magnifier</td>
<td>14.0.1512</td>
<td>• Windows 7 SP1</td>
<td>• Students have access to research tools and a built-in clipboard that can store content copied before testing began.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 8.1</td>
<td>• Because the test delivery system cannot confirm appropriate configurations are in use during testing, the test administrator or test examiner will need to ensure the student does not use features outside of the screen reader functionality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 10</td>
<td>• MAGic Magnifier includes optional text-to-speech.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2016 R2</td>
<td></td>
</tr>
<tr>
<td>ZoomText Magnifier</td>
<td>2019.1904.80</td>
<td>• Windows 7 SP1</td>
<td>• This software requires additional setup before use with the test delivery system (refer to the <a href="#">configuration instructions</a>).</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>• Windows 8.1</td>
<td>• ZoomText Magnifier includes optional text-to-speech.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Windows Server 2016 R2</td>
<td></td>
</tr>
</tbody>
</table>
Configuring ZoomText or Fusion to Recognize the Secure Browser

**Note:** Configuring ZoomText to recognize the secure browser will prevent ZoomText from reading aloud the content of test pages (including ELA passages, for which read-aloud is not permissible; and questions, for which read-aloud is permitted). If students who still require read-aloud functionality may use ZoomText's built-in Speakit Tool. However, it is recommended that students requiring both magnification and read-aloud test with Fusion or use JAWS alongside the secure browser’s embedded zoom tools.

When displaying a test with a print-size accommodation above 4× magnification, the secure browser automatically enters streamlined mode. To retain the standard layout of a test but display it with a print magnification above 4×, consider using ZoomText or Fusion, which are magnification and screen-reading software that can be used with the secure browser. Use the following procedure to ensure ZoomText or Fusion recognizes the secure browser.

1. If ZoomText or Fusion is running, close it.
2. In Windows Explorer, go to the installation directory for the local version of ZoomText or Fusion. For example, with ZoomText version 10.1:
   - Go to `C:\Program Data\Freedom Scientific\ZoomText [version]\`
3. In a text editor, open the file `ZoomTextConfig.xml`.
4. Search for a line containing the D2DPatch property, similar to the following:
   ```xml
   <Property name="D2DPatch" value="*,~dwm,~firefox,~thunderbird"/>
   ```
5. On the same line, type `~CASecureBrowser12.0`, immediately after `~firefox`, (be sure to include the tilde and the comma).
6. Save and close the file.
Auditory Assistance Resources

Automatic Volume Reduction

Disabling Volume Reduction

These instructions are for Windows 10. Other versions of Windows will have similar instructions.

1. Open the Start menu.
2. Right-click the [Sound] speaker [ ] icon in the taskbar. The Sound interface will open (Figure 47).

3. Select the [Communications] tab.
4. Select the Do nothing radio button, which is indicated in Figure 47. (By default, the option to Reduce the volume of other sounds by 80% is selected.)
5. Select the [OK] button.
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Chapter 4. Testing Students with Accessibility Resources
Creating a Test Session for Practice and Summative Testing

Resources in This Section:

- California Assessment of Student Performance and Progress (CAASPP) website—http://www.caaspp.org/
- English Language Proficiency Assessments for California (ELPAC) website—https://www.elpac.org/

This section provides a brief overview of the processes for verifying students’ test settings for summative testing, creating a test session, approving students to enter the session, and viewing embossing and enlarged-text requests.

It is important that a student who is taking the braille assessment have adequate time in advance of test administration to practice navigating the assessment platform with the screen reader. Familiarization with the testing environment, navigation quick keys, as well as item types encountered on the assessment can be addressed by using the practice and training tests.

The practice and training tests can be used as a “guest” without logon credentials or in a secure browser environment approved by a test administrator or test examiner. If the student is accessing a practice or training test in the secure browser environment, student sign-in and test administrator or test examiner logon credentials are required.

Step 1. Test Administrator, Test Examiner, LEA Coordinator, or Test Site Coordinator: Review the student’s test settings in the Test Operations Management System (TOMS).

1. Open an internet browser.
2. Go to the CAASPP website or ELPAC website and select the [Test Operations Management System (TOMS)] button.
3. Log on using the assigned Single Sign-On account.
4. When logged on, select the [Students] tab on the top navigation bar.
5. Using the Search for Students data-entry screen shown in Figure 48, either enter the student's name or other identifying information and then select [SEARCH] to find a student.

6. Select the magnifying glass [View] icon for the student in the Actions column, shown in Figure 49.
7. The student’s details are displayed on the Student Profile screen, under the [Demographics] tab (indicated in Figure 50).

![Figure 50. Student Profile, [Demographics] tab](image)
8. Select the [Test Settings] tab (Figure 51).

![Figure 51. Student Profile, [Test Settings] tab](image)

9. Review the student’s test settings in the Student Profile before approving the student for testing. The following settings in TOMS, which can be applied by a CAASPP or ELPAC test site coordinator or local educational agency (LEA) CAASPP or ELPAC coordinator, ensure that the student has the appropriate Individuals with Disabilities Education Act (IDEA) indicators (special education and a primary disability) or Section 504 plan for the applicable settings. What follows are the settings for students with visual impairment:

- **Embedded Accommodations**
  - **Braille**, which includes the ability to emboss on demand (The print-on-demand accommodation does not have to be set specifically.) (CAASPP and ELPAC)
  - **Audio Transcript (Includes Braille Transcript)**, which is used in conjunction with braille (CAASPP and ELPAC)

- **Embedded Designated Supports**
  - **Permissive Mode**, which is used with assistive software and devices
  - **Streamline**, which includes zoom levels greater than 3× in the student interface, should be selected if a screen reader or magnification will be used
Testing Students with Accessibility Resources | Creating a Test Session for Practice and Summative Testing

- Print Size, which indicates if an enlarged font will be used both onscreen and as output for a print-on-demand request, or if the default zoom levels for on-screen test presentation need to be set

- Non-Embedded Designated Supports
  - Magnification, if a magnifier will be used (Magnification also may be used in association with print-on-demand.)

**Notes:**
- Other settings that the student’s individualized education program or Section 504 plan team has assigned should be selected as well.
- The LEA CAASPP coordinator should contact the California Technical Assistance Center by phone at least one to two business days before testing to have print-on-demand enabled.

**Alert:** *Permissive Mode* and *Magnification* should be selected if a magnifier or screen reader will be used.

10. Select [UPDATE] to save changes, then log off using the [Logout] button when finished reviewing the test settings in TOMS.

**Step 2. Test Administrator or Test Examiner: Log on to the Test Administrator Interface.**

1. Use an internet browser to go to the CAASPP website or ELPAC website and select the button representing the system to be accessed.

2. Select either the [Test Operations Management System (TOMS)] button (to manage administration details of the online Smarter Balanced Summative and Interim Assessments, like student test settings), the [Test Administrator Interface for All Online Tests] button (to administer and monitor online student assessments), or the [Practice & Training Tests] button (to practice administering online assessments to students), as shown for CAASPP.org in [Figure 52](#). (These buttons also are available for selection on ELPAC.org.)

**Figure 52. Buttons on CAASPP.org**
3. Log on with the Single Sign-On username and password in the screen that is shown in Figure 53.

Figure 53. Test administrator and test examiner Logon screen
Step 3. Test Administrator or Test Examiner: Create a test session.

1. In the test selection box shown in Figure 54 (operational assessments) or Figure 55 (practice and training tests), select the test(s) to include in the test session.

![Figure 54. Creating a test session, operational assessments](image)
2. Select the [Start Operational Session] button. The Session ID, such as the one in Figure 56, will be generated automatically. Please make a note of this session ID. The session ID for the training tests starts with “TRAIN.”

Step 4. Test Administrator or Test Examiner: Approve student for operational or training testing.

1. On the Test Administrator Interface, the student’s name and selected test will appear in the Approvals preview box, shown in Figure 57.
2. Select the [Approvals (#)] button. The Approvals and Student Test Settings screen will display.

3. On the Approvals and Student Test Settings screen, select the [Details] eye [ ] icon, shown in Figure 58, for a student.

![Figure 58. Approving the student’s test in the Test Administrator Interface](image)

4. The student’s test settings will appear on the screen like the one presented in Figure 59.

![Figure 59. Sample student test settings in the Test Administrator Interface](image)
5. Verify that all other test settings are correct (refer to step 1). Contact the CAASPP or ELPAC test site coordinator or LEA CAASPP or ELPAC coordinator to have them set if they are not.

- Confirm that streamline mode, permissive mode, zoom, and questions and stimuli test settings are correct.

- **If the field for student’s test presentation is not set to Braille, the test administrator or test examiner should not approve the test.** The student’s information must be updated in TOMS before the student can test. If the test was approved before the test settings were corrected, the LEA CAASPP coordinator or CAASPP test site coordinator must complete a Security and Test Administration Incident Reporting System form to file a report and then, when directed, an appeal to have the test reset.

- The options for Braille Type may be in the Approvals and Student Test Settings screen. The Braille Type options for each content area are as follows:
  - Mathematics: Nemeth or Unified English Braille (UEB) Math
  - English language arts/literacy (ELA): Contracted or Uncontracted

- Emboss Request Type is a test setting that determines if embossing requests are generated automatically, without student input, or manually, with student input. The default options for each test subject are as follows:
  - Mathematics: Auto-Request
    (As students move through the test, embossing requests will automatically appear on the Test Administrator Interface.)
  - ELA: On-Request
    (Students must manually request printing of passages and questions as they move through the test.)

6. After verifying the student’s test settings are correct, approve the student by selecting [Approve]. The student will appear in the Students in Your Test Session table.

**Step 5. Student: Submit print requests.**

1. For tests that require manual embossing requests or enlarged printing, students must open the context menu for a passage or question and select the print option. The request will be sent to the test administrator or test examiner. The [Context Menu] parallel-line [≡] icon is indicated in a practice test question in Figure 60. Note that the parallel lines of the [Context Menu] are contained within a circle in operational assessments, like this: [≡].

- For passages, the student must select the print option in the passage menu. To print a passage, select the [Print Passage] printer icon.
For questions, the student must select the printer option in the question’s menu. To open the menu, select the [Context Menu] icon at the top of the question. The menu will include a print option. Select [Print Item].

For passages and questions, the student must select the [Print Page] button on the upper-right side of the student interface.

![Image of a question with a print option highlighted]

**Figure 60. Submitting an embossing request**

**Reminder:** For tests that have auto-request enabled for the Emboss Request Type test setting, the embossing requests will automatically appear on the Test Administrator Interface as the student moves through the test. Mathematics tests will default to auto-request and ELA tests will default to on-request unless otherwise indicated by the test administrator in step 4.

**Step 6. Test Administrator or Test Examiner: Approve printing requests.**

**Note:** Embossed tests are not labeled. The test administrator or test examiner must keep track of student print requests as shown in the “Student Print Request” screen.
1. The *Students in Your Test Session* table, sampled in Figure 61, includes an *Actions* column. When a student submits an embossing request, the *Requests* column header changes color, and a [Print] button with an icon of a printer appears for the student who submitted the request.

![Figure 61](image1)

**Figure 61. Students in Your Test Session table, practice test**

2. Select the [Print] button for the student who submitted the print request. The *Student Print Request(s)* window, like the one in Figure 62, will open.

![Figure 62](image2)

**Figure 62. Student’s embossing requests**

3. Review the print requests. Multiple requests may appear.
4. Select [Approve] for each print request that is allowed. Select [Deny] for incorrect (or duplicate) print requests.
5. Process the print requests. (For more information, refer to the “Sending Requested BRF and PRN Files to the Embosser” subsection.)

---

**Policy: Deleting Files and Discarding Test Material**

- When the student’s test session is completed, all digital and printed test materials must be permanently deleted and securely destroyed.
- For instructions on deleting downloaded files, refer to the “Removing Files from the Web Browser Download Archive” subsection.
- Printed test materials must be securely destroyed.
Chapter 5. Requirements for Testing Students with Visual Impairment
Introduction to Testing Students with Visual Impairment

This portion of the guide provides information about supported hardware, software, and version requirements and how to configure Job Access With Speech (JAWS®). General information about administering a test to a student with a braille accommodation and printing test material is also included.

Braille assessments administered in the test delivery system require the use of multiple assistive technology devices and applications, including the refreshable braille displays (RBDs) and screen readers used by students to read and navigate test content, along with the embossers used by test administrators and test examiners to print test content.

RBDs are used to read text-only content on English language arts/literacy (ELA) for the Smarter Balanced assessments, the California Spanish Assessment (CSA), and the English Language Proficiency Assessments for California (ELPAC). Braille embossers are needed to read any content with images in ELA, CSA, and the ELPAC, as well as all the content in mathematics and Science assessments. RBDs must be properly set up before they can be used by students. For information about installing and setting up RBDs, refer to the product’s provided instructions and manuals.

The test delivery system includes several embedded resources that facilitate braille testing, such as braille presentation settings, various print resources for embossing content, and streamlined mode, which arranges test content vertically.

The following bulleted list contains brief descriptions of each section in this portion of the guide.

- **Technology Requirements** outlines the supported operating systems and hardware and software requirements for students and test administrators or test examiners, including test settings in the Test Operations Management System for consideration.

- **Overview of Testing Students Requiring Braille** provides an introduction to testing with braille, including a screenshot of the sample interface that students will use and how test administrators or test examiners configure embossing software, and details about braille-ready format and printer output file types and how to configure them. Information on how to delete temporary downloaded files is also provided.
• **Configuring and Administrating Job Access With Speech (JAWS®)** includes a table of configurable student test settings in TOMS that may be relevant to visually impaired students and instructions for configuring JAWS to work with the secure browser.

• **Running NVDA Screen Reader 2018.1.1 with the Microsoft Take a Test Application for Windows** provides configuration considerations for using the NVDA Screen Reader with the Microsoft Take a Test Application on a device using Windows 10 variants.
requirements for testing students with visual impairment | technology requirements

technology requirements

resources in this section:
- california assessment of student performance and progress (caaspp) website—http://www.caaspp.org/
- elpac website—https://www.elpac.org

the technology requirements in this section are specific to online testing with braille. the hardware and software that are used for braille testing require the use of a supported windows operating system.

for information about complete requirements for online testing, refer to the caaspp and elpac technical specifications and configuration guide for online testing.

notes:
- for security purposes, tablets are not supported for braille testing and should not be used. only desktop and laptop computers should be used when testing with the braille accommodation.
- online braille tests do not support mac os x or its associated screen readers.
- the test delivery system supports screen readers other than job access with speech ® (jaws); however, only jaws screen readers have been thoroughly tested with the online testing system.

software for students

windows secure browser

students will use the same windows secure browser that is used for all online testing. to download the windows secure browser, select the [secure browsers] button on the caaspp website or the elpac website. for secure browser installation instructions, refer to the caaspp and elpac technical specifications and configuration guide for online testing.
**Screen Readers**

**Resources in This Subsection:**
- Freedom Scientific Fusion web page—
  [https://www.freedomscientific.com/products/software/fusion/](https://www.freedomscientific.com/products/software/fusion/)
- Freedom Scientific JAWS® web page—
- Microsoft Windows support | Complete guide to Narrator web page—

**Advisory:** While the products listed in Table 12 have been tested by the American Institutes for Research (AIR) for use with the secure browser and test delivery system, a product’s inclusion in this section does not imply recommendation by the California Department of Education (CDE), Educational Testing Service (ETS), or AIR. **It is the local educational agency’s (LEA’s) responsibility to determine if a product is appropriate for a student, monitor students during testing, and comply with the LEA’s software and security policies.**

Students can use the same screen reader with the Windows secure browser as with other computer applications.

**Note:** Only JAWS may be used on English language arts/literacy (ELA) (CAASPP) and Reading domain (ELPAC) tests, as this is the only supported screen reader that can effectively mute reading passages; another screen reader would allow students to listen to passages instead of reading them, compromising the ability to assess students’ reading comprehension skills. It is also the recommended screen reader for the California Spanish Assessment.
Table 12 provides a list of third-party screen readers that can be used in the test delivery system.

<table>
<thead>
<tr>
<th>Screen Reader</th>
<th>Tested Version</th>
<th>OS Requirements</th>
<th>Minimum System</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Fusion Professional   | • 2019         | • Windows 7 SP1        | • 1.5 GHz i3 dual core processor          | • This software requires additional setup before use with the test delivery system (refer to configuration instructions for JAWS).  
• The test presentation setting must be set to braille, whether the student is a braille user or not. |
|                       | • 2020         | • Windows 8.0          | • 4 GB RAM                                 |                                                                                                                                                     |
|                       |                | • Windows 8.1          |                                            |                                                                                                                                                     |
|                       |                | • Windows 10           |                                            |                                                                                                                                                     |
| JAWS—Professional     | • 18           | • Windows 7 SP1        | • 1.5 GHz Processor                       | • This software requires additional setup before use with the test delivery system (refer to configuration instructions).  
• The test presentation setting must be set to braille, whether the student is a braille user or not. |
|                       | • 2018         | • Windows 8.0          | • 2 GB RAM (for 32-bit)                   |                                                                                                                                                     |
|                       | • 2019         | • Windows 8.1          | • 4 GB RAM (for 64-bit)                   |                                                                                                                                                     |
|                       | • 2020         | • Windows 10           |                                            |                                                                                                                                                     |
| Windows Narrator      | • Windows 10 Version 1809 | • Windows 10 | (no requirements)                          | • The student cannot use Windows Narrator for ELA, ELPAC, or CSA, as the read-aloud of passages cannot be suppressed in this product.               |
Refreshable Braille Displays

Resources in This Subsection:

- Freedom Scientific Focus 40 Blue 5th Generation web page—https://www.freedomscientific.com/products/blindness/focus40brailedisplay/
- HIMS Downloads for Braille Edge 40 web page—https://www.hims-inc.com/brailleproducts_01/
- Humanware Brailliant BI 40 (NEW generation) web page—https://store.humanware.com/hus/brailleproducts_01/

Advisory: While the products listed in Table 13 have been tested by AIR for use with the secure browser and test delivery system, a product’s inclusion in this section does not imply recommendation by the CDE, ETS, or AIR. It is the LEA’s responsibility to determine if a product is appropriate for a student, monitor students during testing, and comply with the LEA’s software and security policies.

A student who needs to use an RBD not mentioned in this table should test it with a practice test to ensure there are no issues before its use with an operational assessment. The student using an RBD for the practice test must log on using a supported secure browser. RBDs not listed here may include unwanted features that students should not use while testing; students may need to be monitored if they use such RBDs.
Table 13 provides a list of supported RBDs that students can use to read braille content.

Table 13. Supported Refreshable Braille Displays

<table>
<thead>
<tr>
<th>RBD Technology</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Braille</td>
<td>• Windows 7 SP1</td>
<td>• Device has Notepad, Scheduler, Alarm, Calculator, and Clock features that cannot be disabled.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.0</td>
<td>• Device is equipped with an SD (secure digital) card that should be removed before student takes a test.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.1</td>
<td>• The test administrator or test examiner will need to ensure the student does not use features outside of the braille display functionality.</td>
</tr>
<tr>
<td></td>
<td>• Windows10</td>
<td></td>
</tr>
<tr>
<td>Braille Edge 40</td>
<td>• Windows 7 SP1</td>
<td>• Device has Notepad, Scheduler, Alarm, Calculator, Stopwatch, Countdown Timer, and Clock features that cannot be disabled.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.0</td>
<td>• Device is equipped with an SD (secure digital) card that should be removed before student takes a test.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.1</td>
<td>• The test administrator or test examiner will need to ensure the student does not use features outside of the braille display functionality.</td>
</tr>
<tr>
<td></td>
<td>• Windows10</td>
<td></td>
</tr>
</tbody>
</table>
### Table 13 (continuation one)

<table>
<thead>
<tr>
<th>RBD Technology</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BrailleNote Touch 32 Cell</td>
<td>• Windows 7 SP1</td>
<td>• Other applications present include a Word processor, Email, Internet, Contacts, Planner, File Manager, Calculator, Victor-Reader, Play Store, and KNFB Reader.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.0</td>
<td>• Student can only use device for testing in Braille Terminal mode.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.1</td>
<td>• Device is equipped with an SD (secure digital) card that should be removed before student takes a test.</td>
</tr>
<tr>
<td></td>
<td>• Windows10</td>
<td>• The test administrator or test examiner will need to ensure the student does not use features outside of the braille display functionality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Students should not use the HumanWare Brailliant BI 14 RBD, which can automatically synchronize notes typed internally with a mail application, potentially violating test security.</td>
</tr>
<tr>
<td>Brailliant 40 Cell</td>
<td>• Windows 7 SP1</td>
<td>• There can be a security concern if using the wrong version of this product.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.0</td>
<td>• AIR recommends RBDs with at least 40 cells, but students may use displays with fewer cells if preferred.</td>
</tr>
<tr>
<td></td>
<td>• Windows 8.1</td>
<td>• Students should not use the HumanWare Brailliant BI 14 RBD, which can automatically synchronize notes typed internally with a mail application, potentially violating test security.</td>
</tr>
</tbody>
</table>
### Table 13 (continuation two)

<table>
<thead>
<tr>
<th>RBD Technology</th>
<th>OS Requirements</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| **Focus 40 Blue 5th Generation**| • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows10               | • Device has Scratchpad with Braille-Ready Format (BRF) Bookreader, Calendar, and Clock features that cannot be disabled.  
• Device is equipped with an SD (secure digital) card that should be removed before student takes a test.  
• The test administrator or test examiner will need to ensure the student does not use features outside of the braille display functionality. |
| **QBraille XL**                 | • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows10               | • Students using the QBraille XL in the test delivery system must be monitored to ensure they are not accessing unwanted internal applications, such as the calculator and notepad. |
Software for Test Administrators and Test Examiners

Embossers and Embossing Software

Resources in This Section:


Embossers must be used to print any test content that cannot be read by RBDs, this includes all content on Mathematics and Science tests, and some of the content on ELA and Social Sciences tests. Different embossing software is required for printing printer output (PRN) and BRF file types. The printed file types depend on the content being embossed.

Table 14 provides a list of embossers and embossing software supported for test administrator and test examiner computers.

<table>
<thead>
<tr>
<th>Embosser or Software</th>
<th>Supported Versions</th>
<th>OS Requirements</th>
<th>Minimum System</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Duxbury Braille Translator | • 11.1  
• 11.2  
• 11.3  
• 12.1  
• 12.2 | • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows 10 | • 1 GHz Processor  
• 1 GB RAM (for 32-bit)  
• 2 GB RAM (for 64-bit) | • This software requires additional setup before use with the test delivery system (refer to the configuration instructions)  
• This software is used for embossing BRF files from print requests containing only text or formatted tables. |
### Technology Requirements

**Table 14 (continuation one)**

<table>
<thead>
<tr>
<th>Embosser or Software</th>
<th>Supported Versions</th>
<th>OS Requirements</th>
<th>Minimum System</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| ViewPlus embosser + ViewPlus Desktop Embosser driver | • Max  
• Premier  
• Columbia 2 | • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows 10 | N/A | • This product requires additional setup before use with the test delivery system (refer to the configuration instructions).  
• The embosser is used for embossing PRN files from print requests with tactile or spatial components, such as images.  
• A ViewPlus embosser requires that the user download and install the embosser driver prior to embossing.  
• PRN files are formatted for a specific printer driver and may need to be converted for use with the specific embosser (refer to the “Converting and Printing PRN Files” subsection for more details). |
### Table 14 (continuation two)

<table>
<thead>
<tr>
<th>Embosser or Software</th>
<th>Supported Versions</th>
<th>OS Requirements</th>
<th>Minimum System</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Tiger Software Suite (Tiger Designer and Tiger Viewer) | • 4.2  
• 5  
• 6 | • Windows 7 SP1  
• Windows 8.0  
• Windows 8.1  
• Windows 10 | N/A | • Download the Tiger Designer prior to testing as some PRN files will need to be converted in this program before embossing  
• Refer to the “Converting and Printing PRN Files” subsection for more details. |
TOMS Test Settings for Consideration

Resources in This Section:

- CAASPP Student Accessibility Resources and Test Settings web page—http://www.caaspp.org/administration/accessibility/
- ELPAC Student Accessibility Resources web page—https://www.elpac.org/test-administration/accessibility-resources/

*Table 15* is a list of all test settings in TOMS that should be considered for students with a visual impairment prior to the start of summative testing. For a comprehensive explanation of every test setting available in TOMS, please refer to the file specifications in the Online Student Test Settings template—for CAASPP, posted on the *CAASPP Student Accessibility Resources and Test Settings* web page; for the ELPAC, posted on the *ELPAC Student Accessibility Resources* web page. Refer also to the *CAASPP and ELPAC TOMS User Guide* for instructions on how to set accessibility resources for students.
Table 15. TOMS Student Test Settings for Students with Visual Impairment

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
</table>
| Embedded Accommodation      | Audio Transcript (Includes Braille Transcript) | • Blank (default) • Selected          | • Smarter English Language Arts/Literacy (ELA) Listening  
• California Science Test (CAST)  
• California Spanish Assessment (CSA)  
• ELPAC (online) | Content that is accessed through listening during the course of the assessment with the option of closed captioning is made available in braille or on-screen as a single text presentation (rather than one line at a time as provided by closed captioning). |
| Embedded Accommodation      | Braille                                     | • Blank (default) • Selected          | • Smarter ELA  
• Smarter Mathematics  
• CAST  
• CSA  
• ELPAC (online) | • Braille is a language support.  
• **Braille is not available for the California Alternate Assessment.** |

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Customization Copyright © 2019 by the California Department of Education
Table 15 (continuation one)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
</table>
| Embedded Accommodation      | Text-to-Speech Reading Passages | • Blank (default)  
• Selected         | • Smarter ELA PT  
• CSA  
• ELPAC           | • Text is read aloud to the student via embedded text-to-speech technology. The student is able to control the speed as well as raise or lower the volume of the voice via volume control.  
• This accommodation is available for all grades. |
Table 15 (continuation two)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Embedded Accommodation</td>
<td>Print-on-Demand</td>
<td>Blank (default)</td>
<td>Smarter ELA</td>
<td>• Print-on-demand for test stimuli and items, stimuli only, or items only is set by having the local educational agency (LEA) CAASPP coordinator contact the California Technical Assistance Center (CalTAC) only.</td>
</tr>
<tr>
<td></td>
<td>(Note: This accommodation is not</td>
<td>Stimuli</td>
<td>Smarter Mathematics</td>
<td>• Configuring this accommodation in the upload file or on the TOMS user interface will not automatically activate it for the assigned student.</td>
</tr>
<tr>
<td></td>
<td>required when the braille accommodation has been selected.)</td>
<td>Items</td>
<td>California Alternate Assessment (CAA) ELA</td>
<td>• All requests must be approved by CalTAC and the California Department of Education (CDE).</td>
</tr>
</tbody>
</table>
### Table 15 (continuation three)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Embedded Accommodation</td>
<td>Read-Aloud Reading Passages</td>
<td>• Passages</td>
<td>• Smarter ELA</td>
<td>Text is read aloud to the student by a trained and qualified human reader. All or portions of the content may be read aloud.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• CSA</td>
<td></td>
</tr>
<tr>
<td>Embedded Designated Support</td>
<td>Color Contrast</td>
<td>• Default (Black on White)</td>
<td>• Smarter ELA</td>
<td>By default, tests are presented with black text on a white background. Students who require a different combination of text and background should be assigned the appropriate setting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reverse Contrast</td>
<td>• Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Black on Rose</td>
<td>• CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Medium Gray on Light Gray</td>
<td>• CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Yellow on Blue</td>
<td>• CAA Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• ELPAC (online)</td>
<td></td>
</tr>
</tbody>
</table>
Table 15 (continuation four)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Designated Support</td>
<td>Permissive Mode</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>Permissive mode should be enabled for students who require access to approved accessibility software, devices, or both in order to interact with the test (e.g., screen readers, magnifiers, speech-to-text, braille screen readers, and refreshable braille displays, etc.). When permissive mode is disabled, the only application that can be open on the computer is the secure browser.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ELPAC (online)</td>
<td></td>
</tr>
</tbody>
</table>
## Table 15 ( continuation five )

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Designated Support</td>
<td>Print Size</td>
<td>• No zoom applied (default)</td>
<td>Smarter ELA</td>
<td>This resource sets student’s font size.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1.5×</td>
<td>Smarter Mathematics</td>
<td>This is the font size the student should have when starting a test.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1.75×</td>
<td>CAA ELA</td>
<td>The selected font size becomes the default for all questions in that test.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2.5×</td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 3×</td>
<td>CAA Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ELPAC (online)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The default font size for all tests is 14 point.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The default font for ELA tests is Times New Roman.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The default font for mathematics tests is Verdana.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 15 (continuation six)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
</table>
| Embedded Designated Support | Streamlined Interface | • Blank (default)  
• Selected | • Smarter ELA  
• Smarter Mathematics  
• CAA ELA  
• CAA Mathematics  
• CAA Science  
• CAST  
• CSA  
• ELPAC (online) | • By default, all tests use the standard interface. The streamlined interface presents an alternate, simplified format in which the questions are displayed below the stimuli.  
• This interface is compatible with all supported desktops.  
• All tool and navigation buttons are on the bottom of the screen.  
• This accommodation includes zoom levels greater than 3× in the student interface.  
**Important:** The streamlined interface is not intended to be tablet compatible. |
### Table 15 (continuation seven)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Designated Support</td>
<td>Text-to-Speech Items and Stimuli</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>Text is read aloud to the student via embedded text-to-speech technology. The student is able to control the speed as well as raise or lower the volume of the voice via a volume control.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items (ELA; CSA; ELPAC Listening, Speaking, and Writing)</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Items and Stimuli (Mathematics; Science; ELPAC Listening, Speaking, and Writing)</td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Smarter ELA</td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Smarter Mathematics</td>
<td>ELPAC</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Embedded Designated Support</th>
<th>Color Contrast</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>Test content of online questions may be printed with different colors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected</td>
<td>Smarter Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ELPAC (online)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 15 (continuation eight)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Embedded Designated Support</td>
<td>Magnification</td>
<td>• Blank (default)</td>
<td>Smarter ELA</td>
<td>The size of specific areas of the screen (e.g., text, formulas, tables,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected</td>
<td>Smarter Mathematics</td>
<td>graphics, and navigation buttons) may be adjusted by the student with an</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA ELA</td>
<td>assistive technology device.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAA Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ELPAC (all)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 15 (continuation nine)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
</table>
| Non-Embedded Designated Support | Print-on-Demand (Note: This accommodation is not required when the braille accommodation has been selected.) | - Blank (default)  
- Stimuli  
- Items  
- Items and Stimuli | ELPAC (online) | - Print-on-demand for test stimuli and items, stimuli only, or items only is set by having LEA ELPAC coordinator contact CalTAC only.  
- Configuring this accommodation in the upload file or on the TOMS user interface will not automatically activate it for the assigned student.  
- All requests must be approved by CalTAC and the CDE. |
Table 15 (continuation 10)

<table>
<thead>
<tr>
<th>Type</th>
<th>Display Name</th>
<th>Possible Values</th>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Embedded Designated Support</td>
<td>Read-Aloud Items</td>
<td>• Blank (default) • Selected</td>
<td>Smarter ELA</td>
<td>Text is read aloud to the student by a trained and qualified human reader.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Smarter Mathematics</td>
<td>CAA ELA</td>
<td>All or portions of the questions may be read aloud.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CAA Mathematics</td>
<td>CAA Mathematics</td>
<td>Spanish is available for Smarter Mathematics and the CAST.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CAA Science</td>
<td>CAST</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CAST</td>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CSA</td>
<td>ELPAC (all)</td>
<td></td>
</tr>
</tbody>
</table>

*Text is read aloud to the student by a trained and qualified human reader.*
Testing Students Requiring Braille

Resources in This Section:
- California Assessment of Student Performance and Progress (CAASPP) website—http://www.caaspp.org/
- English Language Proficiency Assessments for California (ELPAC) website—https://www.elpac.org/

Administration Considerations

Planning

The administration of the braille assessment requires advanced preparation for both the test administrator or test examiner and the student. The student accesses the online assessment via assistive technology using a refreshable braille display and screen reading software along with embossed files, which are downloaded directly from the testing platform. A braille embosser that can produce text and graphics may be needed. This may require the student be tested in a separate location and provided with additional time for testing. The protocol for secure testing should be followed.

Although the CAASPP and ELPAC are not timed, students taking the online braille assessment may need additional time due to the need for embossing test materials throughout the assessment. If there are multiple students testing at the same time who require the braille accommodation, logistical planning should occur in advance of the test administration. Ensure that adequate numbers of embossers are available on site. If there are shared resources throughout a local educational agency (LEA), planning in advance of the test administration to alleviate disruption of services for students not taking the assessment is important to consider.

Prior to administering a test, test administrators, test examiners, and any other individuals who are administering any secure CAASPP or ELPAC assessment should read the test administration manuals associated with these programs and view any associated Smarter Balanced training modules. The test administrator, test examiner, or additional support person needs to have a working knowledge of the assistive technology being used by the student and be able to read braille to aid in administration.
List of Preparatory Actions

The following items will aid in administration of braille assessments.

- Ensure that the test administrator or test examiner has adequate training for administering the braille online assessment.

- As the embossed braille files do not have print indicators, consider having a person who reads braille and has training on the testing protocol available during the entirety of testing. (This may be the test administrator or test examiner.)

- Ensure that all assistive technology is properly installed and functioning with the secure browser, including configuring the screen reading program to ensure the screen reading program is recognized by the secure browser and that the assessment is reading properly.

- Install Duxbury and ViewPlus Desktop Embosser Driver software on the test administrator or test examiner device. Ensure that the test administrator or test examiner has a working knowledge of these programs.

- Ensure that a print embosser—used for braille-ready format (BRF) file types—and a graphic embosser—used for printer output (PRN) file types—are installed and functioning on the test administrator or test examiner device.

- Ensure that the student has had adequate opportunity to practice navigating with a screen reader within the testing environment. (Refer to information about practice and training tests in the subsection “Navigating a Test with JAWS”.)

- Emboss the navigation quick key reference guide—available from the secure browser—to have available for the student during testing.

- Select the appropriate summative assessment option for the student.

- Ensure that the student has been registered for the appropriate braille code. This information can be gained from the student’s individualized education program team or the teacher of the visually impaired who is responsible for this student.

- Ensure the appropriate braille code for the student is available for the specific assessment. (Refer to the “About Tests and Braille” subsection for more information.)

- Ensure that Emboss Type is set to on-request or auto-request for each assessment. This may vary from student to student. Often, students prefer emboss on-request for English language arts/literacy (ELA), while the default setting for mathematics is auto-request.

- Gather additional resources the student may need for the day of the assessment such as abacus, Perkins Brailler, braille paper, braille notetaker (if allowed as an accommodation for notetaking), talking calculator (if using a calculator other than the embedded calculator as an accommodation), other notetaking tools, headphones, and other resources.
About Tests and Braille

About Using Braille in Training Tests:

- Students who need to take a training test using the braille accommodation must log on to a training test session with a test administrator or test examiner.
- Students cannot emboss test content directly from their computers.
- Students should use the secure browser for training tests so that their experience with testing is more similar to the operational testing environment.
- Students testing in braille through the test delivery system require the use of multiple assistive technology devices and applications, including refreshable braille displays (RBDs) and Job Access With Speech ® (JAWS).

The online test delivery system is available to students who use braille, allowing them to access the adaptive algorithm and use the online systems in a similar fashion to general education students.

Students who have a braille accommodation will receive the online assessments in an accessible format via streamline mode (refer to Figure 64). The streamline feature is optimized to allow supported screen-reading software and printing of passages and test questions to braille embossers.

All test content may be delivered to a braille embosser.

Alert: Mathematics content requiring Nemeth translation cannot be delivered to an RBD.

Overview of Braille Types

For braille assessments, students can use any of the following braille options, depending on the assessment:

- English Braille, American Edition (EBAE) Uncontracted with Nemeth Math
- EBAE Uncontracted with UEB Math
- EBAE Contracted with Nemeth Math
- EBAE Contracted with UEB Math
- Unified English Braille (UEB) Uncontracted with Nemeth Math
- UEB Uncontracted with UEB Math
- UEB Contracted with Nemeth Math
- UEB Contracted with UEB Math
Notes:

- The test delivery system continues to support three braille types that predate those listed above. These legacy braille types are only available for certain test subjects.
- The “Nemeth” braille type has the same formatting attributes as the “EBAE Contracted with Nemeth Math” braille type.

The braille types for the online Smarter Balanced for ELA and the California Spanish Assessment (CSA) can be broken down into three formatting characteristics: braille type, grade of braille, and test type. These are listed in Table 16.

Table 16. Options for Braille Types—Smarter Balanced for ELA and CSA

<table>
<thead>
<tr>
<th>Braille Type</th>
<th>Grade of Braille</th>
<th>Test Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBAE</td>
<td>Contracted</td>
<td>Online computer adaptive test (CAT)</td>
</tr>
<tr>
<td>EBAE</td>
<td>Contracted</td>
<td>Paper-pencil test (PPT) (CDE approved)</td>
</tr>
<tr>
<td>EBAE</td>
<td>Uncontracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>EBAE</td>
<td>Uncontracted</td>
<td>PPT (CDE approved)</td>
</tr>
<tr>
<td>UEB</td>
<td>Contracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Contracted</td>
<td>PPT (CDE approved)</td>
</tr>
<tr>
<td>UEB</td>
<td>Uncontracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Uncontracted</td>
<td>PPT (CDE approved)</td>
</tr>
</tbody>
</table>

The braille types for the computer-based Summative ELPAC can be broken down into three formatting characteristics: braille type, grade of braille, and test type. These are listed in Table 17.

Table 17. Options for Braille Types—ELPAC

<table>
<thead>
<tr>
<th>Braille Type</th>
<th>Grade of Braille</th>
<th>Test Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEB</td>
<td>Contracted</td>
<td>Online, grades three through twelve</td>
</tr>
<tr>
<td>UEB</td>
<td>Contracted</td>
<td>PPT, grades three through twelve (CDE approved)</td>
</tr>
<tr>
<td>UEB</td>
<td>Uncontracted</td>
<td>PPT, kindergarten through grade two (all domains)</td>
</tr>
</tbody>
</table>
The braille types for the Smarter Balanced for Mathematics and the California Science Test (CAST) can be broken down into four formatting characteristics: braille type, math type, grade of braille, and test type. These are listed in Table 18.

Table 18. Options for Braille Types—Smarter Balanced for Mathematics

<table>
<thead>
<tr>
<th>Braille Type</th>
<th>Math Type</th>
<th>Grade of Braille</th>
<th>Test Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBAE</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>EBAE</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>PPT</td>
</tr>
<tr>
<td>EBAE</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Braille hybrid adaptive test (HAT)</td>
</tr>
<tr>
<td>EBAE</td>
<td>Nemeth</td>
<td>Uncontracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>EBAE</td>
<td>Nemeth</td>
<td>Uncontracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Braille HAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Uncontracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Uncontracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Contracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Contracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Contracted</td>
<td>Braille HAT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Uncontracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Uncontracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>UEB Technical (Math)</td>
<td>Uncontracted</td>
<td>Braille HAT</td>
</tr>
</tbody>
</table>

The braille types for the CAST can be broken down into three formatting characteristics: braille type, math type, grade of braille, and test type. These are listed in Table 19.

Table 19. Options for Braille Types—CAST

<table>
<thead>
<tr>
<th>Braille Type</th>
<th>Math Type</th>
<th>Grade of Braille</th>
<th>Test Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Online CAT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>PPT</td>
</tr>
<tr>
<td>UEB</td>
<td>Nemeth</td>
<td>Contracted</td>
<td>Tactile graphics package</td>
</tr>
</tbody>
</table>
Content Areas and Braille

**English Language Arts/Literacy (ELA)**

The English language arts/literacy (ELA) tests will present students with questions in either contracted or uncontracted literary braille:

- Questions that contain only text will be sent to an RBD.
- Questions that contain text and images that cannot be read by an RBD will be sent to a braille embosser.

**Mathematics**

Students will take the braille hybrid adaptive test (HAT) option for the Smarter Balanced Summative Assessments for Mathematics. All test content will be delivered in EBAE contracted with Nemeth mathematics code via a braille embosser.

The braille HAT includes the following:

- Adaptive segment, which will include only questions that have no graphics
- Fixed form segment, which will include questions with graphics
- Pre-embossed graphic supplement

Refer to the subsection “Using Braille HAT” for additional details about the braille HAT option.

**Listening, Speaking, Reading, and Writing Domains for the ELPAC**

The ELPAC domain assessments will present students with questions in either contracted or uncontracted literary braille:

- Questions that contain only text will be sent to an RBD.
- Questions that contain text and images that cannot be read by an RBD will be sent to a braille embosser.

Students in kindergarten through grade two with the braille accommodation set will take all domains using a paper braille form.

**California Spanish Assessment**

Students who have been assigned the braille accommodation for the CSA will have access to the test questions in uncontracted Spanish braille [Spanish world language braille code]. Through the use of individually allowed accommodations on the test delivery platform, students will be able to access the CSA test questions using assistive technology, such as their refreshable braille display, as well as through a student request to emboss (print) the test questions on demand.
California Science Test

Students who have been assigned the braille accommodation for the CAST have the option of receiving questions printed via embosser or refreshable braille.

Additionally, an optional, supplemental tactile graphics package can be ordered for a student to minimize the amount of embossing that must be done during testing. This package includes pre-embossed materials for all test questions that include a graphic. (Print-on-demand is still available for test questions that are text-only.)

Refer to the subsection “Using CAST Tactile Graphics” for additional details about the CAST tactile graphics.

Using Braille Hybrid Adaptive Test (HAT)

Serving as an alternative to the online adaptive and paper fixed form options, the braille HAT allows local educational agencies (LEAs) to order a set of preprinted, embossed graphics for students’ mathematics tests when the students do not otherwise have access to an embossing printer that works with the Smarter Balanced assessment questions.

This option provides students with access to an efficient online adaptive test that simplifies logistical burdens for educators and students. With the braille HAT option, students can use the online test administration platform, including embedded accessibility resources, while also accessing the pre-embossed graphics.

These graphics packages must be ordered by the LEA CAASPP coordinator for a mathematics summative assessment by contacting the California Technical Assistance Center (CalTAC) by phone at 800-955-2954 or by email at caltac@ets.org at least 14 business days prior to the start of testing at the school. Materials are available only for students in the LEA who have the braille accommodation assigned.

Order of Testing

The Braille HAT consists of a fixed-form segment, a computer adaptive segment, and a performance task. The segments are presented to students in this order.

1. **Fixed-Form Segment:** The fixed-form segment includes questions with tactile graphics. These questions can be embossed at the testing location or received as a package of pre-embossed materials ordered from CalTAC.

2. **Computer Adaptive Segment:** The computer adaptive segment does not include questions with tactile graphics. All questions in this segment can be presented to students using an RBD.

3. **Performance Task:** The performance task does not include questions with tactile graphics. All questions in this segment can be presented to students using an RBD.
Note: If there are multiple students in the school who would benefit from the same package of pre-embossed materials, the pre-embossed materials may be stored securely and used by each student individually as the student takes the assessment. Students sharing the same package of pre-embossed materials must be scheduled to take the assessment at separate times.

In such cases, a test administrator must review the materials to ensure that each student left no markings or information on the sheets that would compromise the validity of results. After the school finishes testing every student who needs these materials, the materials must be securely recycled.

Selecting Braille HAT

The mathematics section of the Smarter Balanced Summative Assessments listing on the Operational Test Selection screen in the Test Administrator Interface includes an option for selecting the Mathematics Braille Hybrid Adaptive Test (indicated in Figure 63).

![Figure 63. Operational Test Selection screen showing the option for Braille HAT](image)

When starting test sessions, be sure to select the appropriate option for students.

The Your Tests page in the student test delivery system also lists the HAT option. Verify that students selected the appropriate option when approving them for testing.
Using CAST Tactile Graphics

Serving as an alternative to the online adaptive and paper fixed form options, the tactile graphics option allows LEAs to order a set of preprinted, embossed graphics for students’ science tests when the students do not otherwise have access to an embossing printer that works with the CAST questions.

This option simplifies logistical burdens for educators and students. With the CAST tactile graphics, students can use the online test administration platform, including embedded accessibility resources, while also accessing the pre-embossed graphics.

These graphics packages must be ordered by the LEA CAASPP coordinator for the CAST by contacting CalTAC by phone at 800-955-2954 or by email at caltac@ets.org at least 14 business days prior to the start of testing at the school. Materials are available only for students in the LEA who have the braille accommodation assigned.

Note: If there are multiple students in the school who would benefit from the same package of pre-embossed materials, the pre-embossed materials may be stored securely and used by each student individually as the student takes the assessment. Students sharing the same package of pre-embossed materials must be scheduled to take the assessment at separate times.

In such cases, a test administrator must review the materials to ensure that each student left no markings or information on the sheets that would compromise the validity of results. After the school finishes testing every student who needs these materials, the materials must be securely recycled.
Using Streamline Mode

The braille reading format is selectable within the student’s test presentation field within the TDS. When braille is selected, the test layout will default to streamline mode. The streamline mode layout, shown in Figure 64, is different from the standard test interface and is designed to interact with Job Access With Speech (JAWS®) navigation. When streamline mode is enabled, the test content is laid out vertically. Passages and stimuli are located at the top of the screen, with questions appearing beneath them.

Increasing Font Size

Students who have a braille accommodation but also have usable vision may use the embedded zoom tool available in the test to adjust the size of text and graphics as necessary, up to four levels of increased magnification. Levels of 5× or greater cause test content to arrange vertically with the streamlined mode required for testing in braille.

- No zoom, 14-point text
- 1.50× zoom
- 1.75× zoom
- 2.00× zoom
- 2.50× zoom
- 3.00× zoom
- 5.00× zoom
- 10.00× zoom
- 15.00× zoom
- 20.00× zoom

With the streamline mode setting, students may increase the font size of questions and stimuli to sizes in excess of the 3.00× permitted by the zoom tool.
Configuring Embossing Software on Test Administrator and Test Examiner Devices

The test delivery system is designed to allow students to print secure test material with test administrator or test examiner approval. This means that the software used for sending print requests to the braille embosser must be installed on the computers that test administrators and test examiners will use for test sessions.

The embossed output for student print requests varies depending on the file type associated with a test question. A test administrator or test examiner must ensure that students have the braille type test setting prior to approving the student for testing, as this determines which file type is used for printing. There are two types of files:

1. **Braille-Ready Format (BRF):** The BRF file type handles print requests for questions containing only text, including formatted tables and poems. This file type is handled by the Duxbury Braille Translator (DBT) software.

2. **Printer Output File (PRN):** The PRN file type handles print requests containing tactile or spatial components such as images, diagrams, etc. This file type is handled by the ViewPlus software.

Upon approving a print request, the test administrator or test examiner must send the file to the embosser using either the DBT software (for BRF files) or ViewPlus (for PRN files) software. The following section provides steps for configuring BRF and PRN files using sample files that are available under the Help Guide menu on the Test Administrator and Test Examiner Practice and Training site, which is linked on both the CAASPP Online Practice and Training Tests Portal and the ELPAC Online Practice and Training Tests web pages.

Instructions for printing files are located in the “Sending Requested BRF and Printer Output Files (PRNs) to the Embosser” subsection.

**Alert:** Test administrators and test examiners will need to ensure that the braille type setting for the student is correct prior to approving the student for testing. The braille type setting (including Nemeth, Contracted, or Uncontracted) determines what file type will be used for student print requests.
Opening Sample BRF and PRN Files on Test Administrator or Test Examiner Computers

This section contains instructions for opening sample BRF and PRN files with the correct software program and setting default printing preferences. The DBT and ViewPlus Tiger Designer software must already be installed.

Configuring BRF Files with the DBT Software

1. Navigate to the CAASPP website or ELPAC website.
2. Select the [Practice & Training Tests] button and then select [Test Administrator and Test Examiner Practice and Training Site] button.
4. Select an assessment.
5. Select the [Help Guide] menu button in the top right-hand corner of the screen (shown in Figure 65).

Figure 65. Selecting the Help Guide menu
6. Select the [Table of Contents] icon in the upper-left corner of the Help Guide screen, which is shown in Figure 66.

![Help Guide screen]

Figure 66. Help Guide screen

7. Select the [Appendices] link in the left navigation column.

8. Select the [Sample Braille Files] link in the left navigation column.

9. Select the [Sample BRF File] link in the left navigation column. Depending on the browser type and configuration, the file dialog box, shown in Figure 67, may open. (Otherwise, the file may download directly.)

![Opening brfsample.brf dialog box]

Figure 67. Opening brfsample.brf dialog box
10. From the drop-down list next to *Open with*, select *Duxbury Braille Translator (default)* and then select the **[OK]** button.

11. This will open the sample file in the DBT program. Continue to step 14.

12. If the *Duxbury Braille Translator* is not available as a selectable program, take these steps to add DBT as the default program for opening BRF files. Note that images may differ based on the operating system being used.

   a. Select the **[Browse]** button. The *Choose Helper Application* window, shown in [Figure 68](#), will open.

   ![Figure 68. The “Duxbury” folder in the Choose Helper Application window](#)

   b. Scroll down or navigate to the “Duxbury” folder and open it.
c. Open the “DBT” folder and select `dbtw.exe`, indicated in Figure 69.

![Image of Choose Helper Application window]

**Figure 69. The `dbtw.exe` file in the Choose Helper Application window**

13. In the Open with program selection window (shown in Figure 70):
   a. Make sure the [Duxbury Braille Translator] icon is selected.
   b. Check the box for *Do this automatically for files like this from now on*.

![Image of Open with window]

**Figure 70. The [Duxbury Braille Translator] icon in the Open with program selection window**

c. Select [OK]. The *Duxbury Braille Translator* program will open and preview the file.
Note: If the **Import File** window appears, set the template to either **English (American) – Standard Literary Format** (for DBT 11.2 or earlier) or **English (BANA Pre-UEB) – Literary Format** (for DBT 11.3 or later), and set the Import Filter to **Formatted Braille**.

14. In the **Duxbury Braille Translator** window shown in **Figure 71**, open the **Global** menu and then select **[Embossing Setup]**.

![Figure 71. The Duxbury Braille Translator window](image)

15. In the **Document: Embossing Setup** window (shown in **Figure 72**), ensure the following are selected:
   - **Brailler Device**: ViewPlus Max (or other ViewPlus embosser)
   - The following **Desired Braille Document Formatting** options must be set:
     - **Emboss in Interpoint** checkbox is **not** selected
     - **Top margin in lines**: 2
     - **Binding margin in characters**: 5

17. In the Duxbury Braille Translator window (Figure 73), open the Global menu and then select Formatted Braille Importer. The Global Formatted Braille Importer window will open.

18. In the Global: Formatted Braille Importer window, select the Read formatted Braille without interpretation box and then select [OK].
19. In the Duxbury Braille Translator window (shown in Figure 74), select the File menu and then select Emboss. The File: Emboss… window will open.

![Duxbury Braille Translator window](image)

**Figure 74. Duxbury Braille Translator window**

20. In the File: Emboss… dialog box, shown in Figure 75, ensure the following are selected:

- **Copies**: 1
- **Page range**: All
- **Brailler Device**: ViewPlus Max (or other ViewPlus embosser)

![File: Emboss… window](image)

**Figure 75. File: Emboss… window**

21. Select [OK].
Configuring PRN Files with the ViewPlus Tiger Software

1. Navigate to the CAASPP website or ELPAC website.
2. Select the [Practice & Training Tests] button, and then select [Test Administrator and Test Examiner Practice and Training Site].
4. When logged on, select the [Help Guide] menu button in the top right-hand corner of the screen (shown in Figure 76).

![Figure 76. Selecting the Help Guide menu](image)

5. Select the [Table of Contents] icon in the upper-left corner of the Help Guide screen, which is shown in Figure 77.

![Figure 77. Help Guide screen](image)

6. Select the [Appendices] link in the left navigation column.
7. Select the [Sample Braille Files] link.
8. Select the [Sample PRN File] link in the left navigation column. Depending on the browser type and configuration, a file dialog window may open. (Otherwise, the file may download directly.)

9. From the drop-down list next to Open with, select Tiger Designer and then select the [OK] button. This will open the sample file in Tiger Designer. Continue to step 11.

10. If Tiger Designer is not available as a selectable program, take these steps to add Tiger Designer as the default program for opening PRN files. Note that images may differ based on the operating system being used.
   a. From the Open with drop-down list, select [Tiger Designer] and select [OK]. The Tiger Designer program opens and previews the file.
   b. If Tiger Designer is not available as a selectable program, select [Browse] and select Tiger Designer from the folder where it is installed.
   c. Check the box for Do this automatically for files like this from now on.
   d. Select [OK]. The Tiger Designer program will open and preview the file.

11. In the Tiger Designer window shown in Figure 78, open the File menu and then select [Print].

   ![Tiger Designer window](image)

   **Figure 78. The Tiger Designer window**

12. The Print window will open.
13. In the Print dialog box, the following must be selected:
   • Printer: Select ViewPlus Max or other supported ViewPlus embosser.
   • Copies: Ensure that only one copy is being printed.

14. When finished, select [Print].

**Note:** If the option to print is disabled, convert the PRN file by opening File → Save As, changing the file type to the Tiger Designer Documents (*.tdsx) file type, and then selecting the [Save] button.

### Sending Requested BRF and PRNs to the Embosser

**Policy:** Deleting Files and Discarding Test Material
   • When the student’s test session is completed, all digital and printed test materials must be permanently deleted and securely destroyed.
   • For instructions on deleting downloaded files, refer to the “Removing Files from the Web Browser Download Archive” subsection.
   • Printed test materials must be securely destroyed.

The instructions in this subsection assume the test administrator or test examiner has begun a test session and approved a print request from a student.

**Notes:**
   • When administering tests, be sure to plug the embosser into the same USB port that was used when it was first set up for testing. Otherwise, the computer may identify the embosser as a new device and require it to be set up again.
   • If a student testing with auto emboss pauses a test before all queued print requests are printed, the student must send manual print requests for any unprinted items that were previously in the queue when testing resumes.
Printing BRF Files

1. Upon approving a print request for a test passage or question that will be printed in BRF format, a print dialog box like the one shown in Figure 79 will open.

![Figure 79. BRF printing dialog box](image)

2. Select the Open with radio button (not Save File).
3. In the drop-down list, make sure Duxbury Braille Translator is selected.
4. Select the [OK] button. The Import File dialog box will open.
5. On the Import File dialog box (refer to Figure 80), ensure that the following are selected:
   - Template:
     - For DBT 11.2 or earlier: English (American) – Standard Literary Format
     - For DBT 11.3 or later: English (BANA Pre-UEB) – Literary Format
   - Import Filter: Formatted braille
6. Select [OK]. The Duxbury Braille Translator preview window will open (refer to Figure 81).

7. In the Duxbury Braille Translator preview window, shown in Figure 81, open the File menu and select [Emboss…]. The File: Emboss… dialog box will open.
8. In the *File: Emboss*… dialog box, shown in Figure 82, ensure the following are selected:
   - **Copies:** 1
   - **Page range:** All
   - **Brailler Device:** ViewPlus Max (or other ViewPlus embosser)

   ![Figure 82. File: Emboss… dialog box](image)

9. When ready, select [OK]. The print request will be sent to the ViewPlus Max embosser.

### Converting and Printing PRN Files

1. Upon approving a print request for a test passage or question that will be printed in PRN format, a print dialog window opens. Select the [Save] button to save the file locally.

2. Locate the saved PRN file and open it.
   a. If Tiger Designer is set as the default program for PRN files, a *Print* dialog box like the one shown in Figure 83 will open.

   ![Figure 83. Tiger Designer print window](image)
b. Ensure that only one copy is being printed.

c. Ensure that ViewPlus Max (or whichever supported ViewPlus embosser is being used) is selected in the Printer drop-down list.

d. Select the [Print] button.

3. If the option to print is grayed out, as shown in Figure 84, convert the file by following these steps:

   a. If a pop-up message appears indicating that the file needs to be converted, select the [Yes] button; this message is shown in Figure 85. If this pop-up message does not appear, then go to File → Save As to convert the file manually.

   ![Figure 84. Grayed-out [Print] button](image)

   ![Figure 85. Convert file message](image)
b. Save the file as a *Tiger Designer Documents (*.tdsx)* file type and select the [Save] button (Figure 86).

![Figure 86. Saving as a .tsdx file](image)

4. When ready, select [Print]. The print request will be sent to the ViewPlus Max embosser.

**Removing Files from the Web Browser Download Archive**

Most supported web browsers automatically save downloaded files. If the device being used automatically saves the BRF and PRN files, ensure that no one else can print the requested test materials. For security purposes, all test-related files must be deleted from a web browser’s download archive, and all hard copies must be securely destroyed.

**Google Chrome**

1. Open Google Chrome.
2. Select the [Customize and control Google Chrome] vertical dots icon in the upper-right corner of the application window.
3. Select Downloads. The Downloads window will open.
4. Remove all test-related files.

   *Option 1:* For each file, select the [X] icon associated with each file.

   *Option 2:* Select the [More actions] vertical dots icon on right side of the “Downloads” bar at the top of the page and then the Clear all list item. (This will not delete any files that may have been saved to the device being used.)
Mozilla Firefox
1. Open Firefox.
2. Open the [View history, saved bookmarks, and more] books icon in the upper-right corner of the application window.
3. Select the [Downloads] icon.
4. Select the [Show All Downloads] link at the bottom of the menu. The Library window will open.
5. Delete all test-related files.
   - Option 1: Select each file and press the [Delete] key on the keyboard.
   - Option 2: Select the [Clear Downloads] link located at the top of the Library window. This will remove all temporary downloaded files, including any other files that may have downloaded. (This will not delete any files that may have been saved to the device being used.)

Microsoft Edge
1. Open Microsoft Edge.
2. Open the [Edge Hub] (Favorites, reading list, bookmarks and downloads) star icon in the upper-right corner of the application window.
3. Select Downloads from within the downloads list.

Note: Depending on download settings (where temporary files are saved), files from the “Temporary Internet Files” folder may also require deletion.
Configuring and Administering with Job Access With Speech (JAWS®)

Resources in This Section:

- Configuring JAWS Demonstration video—

- English Language Arts/Literacy Using JAWS Demonstration video—

- Mathematics Using JAWS Demonstration video—

- Online Test Administration Manual for California Assessment of Student Performance and Progress (CAASPP) Testing web document—

- Summative ELPAC Online Test Administration Manual web document—

Configure JAWS before students use it for online testing. This section contains the instructions for the following tasks:

- Configuring JAWS to Recognize the Secure Browser
- Applying Settings for Contracted and Uncontracted Braille
- Configuring JAWS to Speak “Dollars”
- Optional JAWS Voice Adjustment Settings

The configuration instructions in this section apply to JAWS 18, JAWS 2018, JAWS 2019, and JAWS 2020, as well as Fusion Professional.
Configuring JAWS to Recognize the Secure Browser

Note: The examples and screenshots that follow are for JAWS 2018 installed to the default location. If another supported version of JAWS is present or it is installed to a different location, navigate to the appropriate directory.

1. Open the JAWS ConfigNames.ini file. This file may appear in two folders. Depending on how JAWS is installed on the device, both files may need to be modified. Figure 87 shows a file location.
   - **Start** → **All Programs** → **JAWS 2018 [or other JAWS version]** → **Explore JAWS** → **Explore Shared Settings** (required)
   - **Start** → **All Programs** → **JAWS 2018 [or other JAWS version]** → **Explore JAWS** → **Explore My Settings** (optional)

2. In the ConfigNames.ini file, locate the line of text that contains `firefox:3=firefox`. At the end of this line, press [Enter] on the keyboard to create a new line.

3. In the new line, type in the following string: `CASecureBrowser12.0=firefox` (no ending punctuation).

4. Save the file.

Note: If there is an error message indicating that the user does not have permission to save the .ini file to this location, the user will first need to save the file to the desktop as ConfigNames.ini. After saving the updated .ini file, copy it to the folder containing the original .ini file (referenced in step 1). Confirm replacement of the original file with the file that was just created.
Applying Settings for Contracted or Uncontracted Braille

For students to use contracted or uncontracted literary braille with their refreshable braille display, the correct JAWS setting must be applied prior to launching the secure browser. Braille mode settings also need to be selected.

1. Open JAWS and then select the Utilities menu. In the Utilities menu, select Settings Center. The Settings Center, shown in Figure 88, will open.

![Figure 88. JAWS Settings Center, Contracted Braille Translation screen](image)

2. From the Application drop-down list at the top of the Settings Center screen, select firefox.

3. Users with JAWS 18 or later must take the following actions:
   a. Scroll down to the “Braille” section in the Search for settings panel displayed on the left side and expand the subsettings. The Settings Center window displays the options for Braille Translation.
   b. In the “Translation” section (Figure 89), verify the Language drop-down list is set to English – United States. For a student who prefers contracted braille, select Unified English Braille Grade 2 from the Output and Input drop-down lists. For a student who prefers uncontracted braille, select Unified English Braille Grade 1 from the Output drop-down list.
4. In the **Braille Mode** section, ensure that the four settings that follow—and shown in **Figure 90**—are checked (and only these settings are checked):

- Active cursor follows Braille display
- Braille display follows Active cursor
- Enable Word Wrap
- Auto Detect Braille Display using Bluetooth

5. Select the [**Apply**] button and then select the [**OK**] button.
Configuring JAWS to Speak “Dollars”

The instructions in this subsection will ensure that JAWS correctly speaks the dollar ($) symbol.

1. Open JAWS and then select the Utilities menu. In the Utilities menu, select Settings Center. The Settings Center will open.
2. In the “Search for settings” panel on the left side, scroll down to the Text Processing section and expand the subsettings. Select Speak Dollars.
3. The Settings Center, shown in Figure 91, will display the Number And Date Processing options, including Speak Dollars.

4. Check the box for Speak Dollars.
5. Select [Apply] and then select [OK].

Optional JAWS Voice Adjustment Settings

JAWS voice settings may be adjusted for individual students based on their individual needs. The following settings must be set prior to administering assessments: Voice Profile, Speaking Rate, and Punctuation. Instructions for each setting follow.
Alert: Any optional JAWS settings for a student must be set prior to launching the secure browser. Students should take one or more practice tests using JAWS so they can determine whether these settings need to be adjusted.

Opening the JAWS Voice Adjustment Window

Open JAWS and select the Options menu. In the Options menu, select Voices and then Voice Adjustment, as shown in Figure 92. The Voice Adjustment interface will open.

Adjusting JAWS Voice Profile, Speaking Rate, and Punctuation Settings

Voice Profile, Speaking Rate, and Punctuation can be set in the Voice Adjustment interface, shown in Figure 93. When all settings are saved, select the [OK] button.
Requirements for Testing Students with Visual Impairment |
Configuring and Administering with Job Access With Speech (JAWS®)

Voice Profile
1. Select a Voice Profile from the Profile Name drop-down list.
2. Select the [Apply] button.

Voice Rate
1. In the Voice section, drag the slider to the desired rate of speed. The lower the rate, the slower the words will be read aloud.
2. Select [Apply].

Punctuation
1. In the Voice section, select the Punctuation drop-down list. Select from the following options: None, Some, Most, and All.
2. Select [Apply].

Navigating a Test with JAWS

Note: For detailed information about administering online tests, refer to the Online Test Administration Manual for California Assessment of Student Performance and Progress (CAASPP) Testing or the Summative ELPAC Online Test Administration Manual.

This section provides an overview of how students can navigate through the test and test questions using JAWS commands.

As test administrators and test examiners work with students to familiarize them with using the test delivery system, they should make students aware that the braille transcriptions may not follow the usual braille rules. Test administrators, test examiners, and students should review the information in this section prior to taking a practice or training test or operational assessment.

Tip: As the student interface has recently been updated, students are encouraged to take multiple practice tests to ensure familiarity with JAWS navigation during testing.
Navigating the Sign-In Page

Note: If the student navigates to the JAWS application window while signing in, the student can return to the secure browser by pressing [Insert] + [F10] on a standard Windows keyboard or by pressing [Spacebar] + [S] (dots 2, 3, and 4) on a Perkins braille keyboard. Keyboard layouts may vary by device. Refer to the manual provided by the device manufacturer for more information.

This subsection provides instructions about how students navigate the sign-in pages of the test delivery system. A student will take the following actions to navigate the Student Sign-In screen:

- To listen to each line of text, the student will press the [Down] arrow.
- To move to the [Return to Login] and [Begin Test Now] buttons, the student will press the [Tab] key until the necessary button is reached.
- To select the [Return to Login] or [Begin Test Now] button, the student will press [Enter].

Please Sign In Screen, Operational Assessment

1. Open JAWS on the student device.
2. To access an operational or training test, open the secure browser on the student device. The student Please Sign In screen, shown in Figure 94, will display.

![Figure 94. Student Please Sign In screen](image-url)
3. If the student needs to take a practice test, select [Go to the Practice and Training Test Site].

4. On the Please Sign In web form, students must enter their first name, Statewide Student Identifier (SSID), and the Session ID, and then select [Sign In].
   a. Students will press the [Tab] key to navigate to the First Name field. Students should enter their first name.
   b. Students will press the [Tab] key to navigate to the Student ID field. Students should enter their SSID.
   c. Students will press the [Tab] key to navigate to the first text box for the Session ID. If the first part of the Session ID not already entered, students should enter the first portion of the hyphenated text given by the test administrator or test examiner.
   d. Students will press the [Tab] key to navigate to the second text box for the Session ID and then enter the next set of hyphenated text given by the test administrator or test examiner.
   e. Students will press the [Tab] key to navigate to the third text box for the Session ID and then enter the remaining text given by the test administrator or test examiner.
   f. Students will press the [Tab] key to navigate to the [Sign In] button and then press the [Enter] key to log on.

**Note:** Session IDs will have three parts. As a result, the Session ID field is split into three text boxes. The hyphens are provided automatically.
Please Sign In Screen, Practice and Training Tests

1. To access a practice test as a guest, students will go to the CAASPP website or the ELPAC website and select the [Practice & Training Tests] button to open the Online Practice and Training Tests Portal web page.

2. Students will select the [Student Interface Practice and Training Tests] button.

3. On the Practice and Training Test Sign In screen, students should select (click) the toggles next to Guest User and Guest Session so they read Off. These toggles are indicated in Figure 95.

Figure 95. Please Sign In screen for the practice and training tests
4. Students should enter their SSID, first name, and the Session ID, and then select [Sign In].

Optional: While students may log on as a guest user, logging on with their own SSID and First Name is recommended to aid tracking print requests on the Test Administrator Interface.

Required: To enable print requests, students must not use Guest Session. The Guest Session checkbox should be unchecked.

*Is This You? Screen*

This screen requires students to verify personal information.

1. On the *Is This You?* screen (shown in Figure 96), students must verify their personal information. If the information is correct, students should select [Correct].
   a. To listen to each line of text, the student presses the [Down] arrow. The listed demographic information will be read aloud.
   b. To move to the [Yes] and [No] buttons, the student presses the [Tab] key.
   c. To select the [Yes] or [No] button, the student presses [Enter].

![Is This You? student verification screen](image-url)
Your Tests Screen

This screen lists the available tests for the student’s grade level (Figure 97), which shows the options for a practice test. Tests are listed in a two-column table. Students will hear the test name, then the opportunity number, and then the link to choose that test.

1. To move to the first test listed on this screen, the student presses the [Tab] key.
2. To navigate between the test names, the student presses the [Tab] key. The order of navigation is from left to right and top to bottom, in a zigzag pattern.
3. To start or resume the test in focus, the student presses the [Enter] key.
Instructions and Help and the Review Test Settings Pages

The Instructions and Help screen allows access to the student Help Guide and the Test Settings page. Students must access the Review Test Settings page to verify that all test information and settings are correct. Settings may look different for different assessments.

1. After the student has been approved, the Instructions and Help screen, shown in Figure 98, appears. The student has the option of continuing to the assessment, reviewing test settings, or reviewing the on-screen help.

![Figure 98. Instructions and Help screen](image)

2. The student should take the following steps to navigate the Instructions and Help screen. At any time the student may [Tab] to the [Begin Test Now] button and press [Enter] to begin testing.
   a. To listen to each line of text, the student presses the [Down] arrow.
   b. To move to the [Return to Login] and [Begin Test now] buttons, the student presses the [Tab] key.
   c. To select the [Return to Login] or [Begin Test Now] button, the student presses [Enter].
3. The student should verify that all test information is correct by selecting the [View Test Settings] button and reviewing the settings on the screen, displayed in Figure 99.

![Review Test Settings screen](image)

*Figure 99. Review Test Settings screen*

- a. To listen to each line of text, the student presses the [Down] arrow.
- b. The student presses [Enter] to select [OK] and confirm the settings.
- c. If the information is not correct, the student should navigate to the [Return to Login] button and press [Enter], and then communicate the incorrect information to the test administrator or test examiner.
4. The student should select the [View Help Guide] button for additional information about the assessments, either CAASPP or ELPAC. (the student presses the [Tab] key to navigate to the [View Help Guide] button and then presses [Enter].) The Help Guide screen, like the one shown in Figure 100, appears.

![Help Guide](image)

**Figure 100. Test Instructions and Help screen**

a. The student presses [Tab] to navigate to the [Back] button and then presses [Enter] to return to the Instructions and Help screen.

5. To proceed and start the test, the student should navigate to [Begin Test Now] and then press the [Enter] key.
Navigating Within the Test

This subsection provides instructions that describe how students can move around on a test page.

Notes:

- The first time the test loads, JAWS may start reading everything until the student stops it by pressing the [Ctrl] key. However, on the next test page, JAWS will focus on the first question on the page.
- The instructions in this subsection provide only the keyboard commands for online testing. Students testing with a refreshable braille display (RBD) that has router keys may also press the router key above the text for a particular button to move the cursor to that button. They can press the router key a second time to select that button instead of using the provided keyboard commands.
- The default setting for JAWS 18+ for California is Only Read Items Aloud.

About Test Elements

A test page has up to three primary landmark elements: the Banner (test and student information) Region, Navigation and Test Tools Region, and the Test Content Region, where the test content is located (shown in Figure 101). Students navigate between these landmarks in JAWS by pressing the [R] key.

Figure 101. Example test page in streamline mode
1. **Banner Region:** The banner contains the test information row, which displays the current question number(s), test name, student name, test settings button, pause button, and help button.

2. **Navigation and Test Tools Region:** This region displays the navigation and tool buttons.

3. **Test Content Region:** This section contains the test content, which has the following parts:
   - **Stimulus:** The “Stimulus” region contains the following elements:
     - Stimulus title
     - Stimulus context menu
     - Stimulus content
   - **Question:** Each question in the “Question” region contains the following elements:
     - Question number
     - Question labels
     - Question context menu
     - Question stem
     - Response area or answer options

### JAWS Keyboard Commands
Students use the keyboard commands in Table 20 through Table 23 to navigate within a test page. Students using refreshable braille displays with router keys may also press the router key above the text for a button to move the cursor to that button. They can press the router key again to select that button instead of using the provided keyboard commands.

If JAWS enters Forms mode, these keyboard commands may not work. To exit Forms mode, a student must press Num Pad [Plus] (the “+” key on the keyboard number pad).

**About JAWS Keyboard Commands:** The commands in Table 20 through Table 23 are a subset of all available JAWS commands.

**Tip:** Students are encouraged to practice with the version of JAWS they will use during testing to ensure familiarity with the keyboard commands.
Navigating Sign-In Pages with JAWS Keyboard Commands

Table 20. JAWS Keyboard Commands for the Sign-In Page

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns the focus to the secure browser if the student navigates</td>
<td>[Insert] + [F10] (standard keyboard)</td>
</tr>
<tr>
<td>to the JAWS application window while signing in (Keyboard layouts may</td>
<td></td>
</tr>
<tr>
<td>vary by device. Please refer to the manual provided by the device</td>
<td></td>
</tr>
<tr>
<td>manufacturer for more information.)</td>
<td></td>
</tr>
<tr>
<td>Returns the focus to the secure browser if the student navigates</td>
<td>[Spacebar] + [S] (Perkins braille keyboard)</td>
</tr>
<tr>
<td>to the JAWS application window while signing in (Keyboard layouts</td>
<td></td>
</tr>
<tr>
<td>vary by device. Please refer to the manual provided by the device</td>
<td></td>
</tr>
<tr>
<td>manufacturer for more information.)</td>
<td></td>
</tr>
<tr>
<td>Moves the focus to the next field or button on the page</td>
<td>[Tab]</td>
</tr>
<tr>
<td>Moves the focus to the previous field or button on the page</td>
<td>[Shift] + [Tab]</td>
</tr>
<tr>
<td>Reads the next line on the page</td>
<td>[Down] Arrow</td>
</tr>
<tr>
<td>Reads the previous line on the page</td>
<td>[Up] Arrow</td>
</tr>
<tr>
<td>Selects the button that is currently in focus</td>
<td>[Enter]</td>
</tr>
</tbody>
</table>

Navigating Test Pages with JAWS Keyboard Commands

Table 21. JAWS Keyboard Commands for a Test Page

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigates to the next landmark element on the page; a test page</td>
<td>[R]</td>
</tr>
<tr>
<td>has up to three primary landmark regions:</td>
<td></td>
</tr>
<tr>
<td>1. <strong>Banner Region</strong> at top of screen displaying the current question</td>
<td></td>
</tr>
<tr>
<td>numbers, test name, student name, <strong>[Test Settings]</strong> icon, <strong>[Pause]</strong></td>
<td></td>
</tr>
<tr>
<td>icon, and <strong>[Help]</strong> icon</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Navigation and Test Tools Region</strong> with navigation and tool</td>
<td></td>
</tr>
<tr>
<td>icons</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Test Content Region</strong> with the following sections:</td>
<td></td>
</tr>
<tr>
<td>• <strong>Stimulus Section</strong>: Contains the stimulus title, stimulus</td>
<td></td>
</tr>
<tr>
<td>context menu, and stimulus content</td>
<td></td>
</tr>
<tr>
<td>• <strong>Question Section</strong>: Contains a question number, question</td>
<td></td>
</tr>
<tr>
<td>labels (labels that appear when an item is marked for review,</td>
<td></td>
</tr>
<tr>
<td>printed, or had a note entered), question context menu, question</td>
<td></td>
</tr>
<tr>
<td>prompt, and the response area</td>
<td></td>
</tr>
</tbody>
</table>
Table 21 (continuation)

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumps to the next heading on the page; in general, the following test components are defined with a heading:</td>
<td>[H]</td>
</tr>
<tr>
<td>• Test name (H1)</td>
<td></td>
</tr>
<tr>
<td>• Student name (H2)</td>
<td></td>
</tr>
<tr>
<td>• Passage title (H3)</td>
<td></td>
</tr>
<tr>
<td>• Question number (H3) (not the actual question text)</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> On test pages that have multiple questions, students can jump directly from one question to the next. To do so, they should press the [H] key and then press the [Down] arrow twice. The question stem will then be read aloud.</td>
<td></td>
</tr>
<tr>
<td>Jumps to the previous region on the page</td>
<td>[Shift] + [R]</td>
</tr>
<tr>
<td>Jumps to the previous heading on the page</td>
<td>[Shift] + [H]</td>
</tr>
<tr>
<td>Moves to the next component on the page; in general, the following test elements are components:</td>
<td>[Tab]</td>
</tr>
<tr>
<td>• Navigation and tool buttons</td>
<td></td>
</tr>
<tr>
<td>• Question number (and associated prompt text)</td>
<td></td>
</tr>
<tr>
<td>• Context menu</td>
<td></td>
</tr>
<tr>
<td>• Response options</td>
<td></td>
</tr>
<tr>
<td>Moves to the previous component on the page</td>
<td>[Shift] + [Tab]</td>
</tr>
<tr>
<td>Selects a button or response option or open a context menu</td>
<td>[Enter]</td>
</tr>
<tr>
<td>Moves to the next line on the page</td>
<td>[Down] Arrow</td>
</tr>
<tr>
<td>Moves to the previous line on the page</td>
<td>[Up] Arrow</td>
</tr>
<tr>
<td>Reads everything on the page (from the current point of focus)</td>
<td>[Insert] + [Down] Arrow</td>
</tr>
<tr>
<td>Stops JAWS from reading</td>
<td>[Ctrl]</td>
</tr>
</tbody>
</table>
### Opening and Using Context Menus with JAWS Keyboard Commands

#### Table 22. JAWS Keyboard Commands for Context Menus

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opens the context menu when JAWS reads “menu button” (This is the only way to open the context menu when streamlined mode is turned on.)</td>
<td>[Enter]</td>
</tr>
<tr>
<td>Moves the focus to the next option in the menu, which JAWS will read aloud</td>
<td>[Down] Arrow</td>
</tr>
<tr>
<td>Moves the focus to the previous option in the menu, which JAWS will read this option aloud</td>
<td>[Up] Arrow</td>
</tr>
<tr>
<td>Selects the menu option currently in focus</td>
<td>[Spacebar]</td>
</tr>
<tr>
<td>Closes the context menu without selecting any option</td>
<td>[Esc]</td>
</tr>
</tbody>
</table>

### Responding to Items with JAWS Keyboard Commands

#### Table 23. JAWS Keyboard Commands for Item Responses

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigates to the item prompt, which JAWS will read aloud</td>
<td>[Tab]</td>
</tr>
<tr>
<td>Navigates to the response area after JAWS reads the prompt aloud (Students may need to press [Tab] multiple times depending on the item type and whether any question labels appear for the item.)</td>
<td></td>
</tr>
<tr>
<td>Navigates between each answer option, text box, selectable text field, keypad button, or checkbox, depending on the item type, in the response area for an item</td>
<td></td>
</tr>
<tr>
<td>Navigates to the previous answer option, text box, selectable text field, keypad button, or checkbox, depending on the item type</td>
<td>[Shift] + [Tab]</td>
</tr>
<tr>
<td>Moves between each answer option for multiple-choice and multiselect items.</td>
<td></td>
</tr>
<tr>
<td>Moves between each line of text in the item for edit task choice items (After students open an <em>Edit</em> menu by pressing [Spacebar], the arrow keys can be used to move between the answer options in the drop-down list.)</td>
<td>[Up] and [Down] Arrow</td>
</tr>
</tbody>
</table>
Table 23 (continuation)

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects the answer option in focus for multiple-choice and multiselect</td>
<td>[Spacebar]</td>
</tr>
<tr>
<td>items</td>
<td></td>
</tr>
<tr>
<td>Opens the Edit menu in which students type or select a response for</td>
<td></td>
</tr>
<tr>
<td>edit task items</td>
<td></td>
</tr>
<tr>
<td>Marks the checkbox in focus for table match items</td>
<td></td>
</tr>
<tr>
<td>Chooses the selectable text area in focus as the answer option for</td>
<td>[Enter]</td>
</tr>
<tr>
<td>hot text items</td>
<td></td>
</tr>
<tr>
<td>Selects an answer option from the drop-down list in the Edit menu for</td>
<td></td>
</tr>
<tr>
<td>edit task choice items</td>
<td></td>
</tr>
<tr>
<td>Selects the keypad button in focus for equation items</td>
<td></td>
</tr>
<tr>
<td>Opens a pop-up menu with special characters for equation items (Students</td>
<td>[Alt] + [7]</td>
</tr>
<tr>
<td>can use the arrow keys to move between the special characters in the</td>
<td></td>
</tr>
<tr>
<td>list and then press [Enter] to insert a special character in the</td>
<td></td>
</tr>
<tr>
<td>response area.)</td>
<td></td>
</tr>
</tbody>
</table>

**Context Menus**

*Note:* When streamline mode is enabled, students cannot use the right-click functionality to access the context menu. Instead, they should follow the instructions in this subsection.

The first question on a test page will automatically be selected (i.e., “in focus”). Any action taken with a keyboard, mouse, or adaptive peripheral device on a selected element will cause a reaction in that element. For example, pressing [Spacebar] when the page from which Figure 102 was excerpted would cause a check mark to appear in the highlighted box next to Strikethrough.

![Figure 102. Page excerpt showing an element in focus](image)

A circle with a solid or dotted line, a highlight, and a blinking cursor are common, visual indications that an element is in focus.
The instructions in this section assume the student wants to open the context menu for the active (in focus) landmark element on the page and has not yet used the [Tab] key to navigate anywhere.

1. The student should ensure the focus is on the element—stimulus or question—for which the context menu is being opened.

2. To navigate directly to the context menu button, the student presses the [Tab] key twice to display the context menu button. JAWS will read the context menu as “Menu button.”

3. The student presses the [Enter] key to open the context menu and display the list of available menu options, as shown in Figure 103. JAWS will read aloud the first item in the menu (for example, “Print Item”).

4. To move up and down the list, the student presses the [Up] and [Down] arrow keys. JAWS will automatically read aloud each question.

5. To select a menu option, the student presses [Spacebar]. To exit the menu without making a selection, the student presses the [Esc] key. JAWS will return the focus to the context menu button.

Question Labels

After students use a context menu tool for a given question, a label for that tool appears next to the question number (also presented in Figure 103). When students navigate to a question with labels, they can press [Tab] to navigate to each label, which JAWS reads aloud.

- When a question is marked for review, JAWS reads “Marked for review” for the question label, which is the [Marked for review] (flag-check) icon.
- When a question has been printed, JAWS reads “Printed” for the question label, which is the [Print] (printer-check) icon.
- When the student has entered a note for a question, JAWS reads “Notes” for the question label, which is the [Notes] (notepad-check) icon.
California Spanish Assessment (CSA) Using a Screen Reader

Nonvisual Information

Be advised that the CSA contains several instances where information not seen by visual test takers is available to those using a screen reader. If a screen reader user leverages line-by-line navigation, JAWS will introduce the nonvisual information by voicing the word, “gráfico.” In these instances, students should be aware that a graphic is not actually present.

The following are scenarios in which this announcement will occur:

- Drama passages, to make a distinction between dialogue and stage directions
- Footnotes, when a definition of a footnote is introduced within a passage
- Blank spaces, in instances where underlining has been tagged as “blank space”
- Abbreviations and Roman numerals, in cases where pronunciation had to be controlled to ensure clarity of the content

Screen Readers and Refreshable Braille

Screen reader software may be used with refreshable braille and audio presentation.

Text to Be Revised

On specific multiple-choice questions, the student may be asked about a portion of the text that may need to be revised. For these questions, students will be presented with four answer choices, each with different versions of the written text. Each answer choice will be followed by a repetition of the answer choice in context of the original excerpt. The answer choices in context are preceded by introductory statements such as, “La oración con cambio, lee:” or “La definición lee:” In some instances, students may want to navigate word-by-word or character-by-character to discern any grammatical or punctuation errors, in addition to addressing any words that may not be pronounced clearly by an assistive technology. Additional information about this portion of the test is included in the test directions.
Responding to Questions

**Note:** The instructions in this section assume that the question does not display any question labels. If the student has used a context menu tool for a question, the student must press [Tab] an additional time for each question label that appears.

This subsection provides basic guidance for responding to question types that may appear on practice or training tests and operational assessments.

**Alert:** Students should review questions via an RBD or printout from a braille embosser before responding to questions.

**Multiple-Choice Questions**

Multiple-choice questions require the student to select one answer option. The response area will display several multiple-choice options as radio buttons. The student must select a radio button.

1. After listening to the question text, the student presses the [Tab] key twice.
2. JAWS will read aloud the option letter and option text that is in focus; these are shown in Figure 104. If the option is an image, JAWS will read the text description associated with the image.

3. To navigate between each answer option, the student uses the [Tab] and [Shift] + [Tab] commands. (The student can also use the [Up] and [Down] arrow keys to move between options.)
4. JAWS will read aloud the text for the option in focus.

![Figure 104. Selecting a radio button](image-url)
5. To select an answer option in focus as the response, the student presses [Spacebar]. The answer option is selected and JAWS reads “Space.” If the student selects an option that has been stricken using the strikethrough tool, JAWS will read “Option is struck through.”

**Hot Text**

Hot text questions require the student to select at least one word, phrase, or sentence. For these question types, it is critical to follow the instructions provided in the question. Some questions may tell the student to select two responses. Others may tell the student to select one response.

*Note: Each selectable text area is predefined. When selecting a phrase or sentence, all of the words in that text area will automatically be marked as selected.*

1. After listening to the question text, the student presses the [Tab] key twice.

2. JAWS will read aloud the text that is in focus (“The sap in sugar maple trees begins flowing in early spring” in Figure 105).

3. To navigate between each selectable text area, the student uses the [Tab] and [Shift] + [Tab] commands.

4. JAWS will read aloud the selectable text.

5. To choose a selectable text area in focus as the response, the student presses the [Enter] key. JAWS will announce the text is checked.
Edit Task

Edit task questions require the student to select a response from a drop-down list, as shown in Figure 106. For these question types, it is critical to follow the instructions provided in the question.

![Figure 106. Edit task: drop-down options](image)

**Notes about JAWS and Edit Task Questions**

- Each selectable text area is predefined. For selectable text, JAWS will indicate whether the word or phrase is selectable and then continue reading the rest of the sentence or line.

**Tip:** It is strongly recommended that students read through an entire question before editing text. Students can listen to the question as well as read it via an RBD or printout from an embosser.

1. The student uses the [Down] arrow to read through each line of text.
2. If a line of text has a selectable word or phrase, JAWS will say “clickable” after the word or phrase.
3. The student navigates to each selectable text field in the question.

   **Option 1:** Return to the beginning of the question.
   a. Press [Shift] + [H].
   b. Press the [Tab] key to go to the first selectable text field.
Option 2: Move backward through the selectable text fields in the question.

a. Press [Shift] + [Tab].

4. When the selectable text is in focus, the student presses [Spacebar]. This will open the edit menu. JAWS will read "Edit tools dialog" aloud and provide additional instructions.

   Drop-down list: The student uses the [Up] and [Down] arrow keys to move between options in the list. JAWS will read each option aloud. To select an option, the student presses [Enter].

5. The student presses the [Tab] key to navigate to the [OK] button in the edit menu and then presses [Enter]. The edit menu will close and the question will be back in focus.

Text Response

Text-response questions, like the sample question in Figure 107, require the student to enter text into a text box. The student may be asked to write a sentence, paragraph, or essay. Some text response questions include a row of text formatting buttons. However, these formatting options are not available to students testing with braille.

![Figure 107. Answering a text-response question](image)

1. The student reads the question and tab to the response area (text box). JAWS will beep and then read, "Edit, type in text" aloud.

2. The student enters a response and then presses the [Tab] key.

3. The student leaves the text box and moves to the next question on the page. JAWS beeps again in a different tone upon leaving the text box.
Text Response with Text Formatting Row

Resources in This Subsection:

  CKEditor_3.x/Accessibility

Text-response questions require the student to enter text into a text box. The student may be asked to write a sentence, paragraph, or essay. These questions include a row for formatting text, which is indicated in Figure 108. Formatting options include bold, underline, italics, numbered bulleting, symbol bulleting, and more. However, these formatting options are not available to students testing with braille. Note that although Figure 108 shows the [Print] printer icon, this option is available in the practice and training tests only.

![Figure 108. Answering a text-response question with text formatting](image)

1. The student reads the question and then tabs to move to the response. JAWS will beep and then read, “Edit, type in text” aloud.
2. The student enters a response into the text box.
3. When the student is finished entering a response, the student presses the [Tab] key to exit the response area.
4. The student will leave the text box and move to the next question or field on the page. JAWS beeps again in a different tone upon leaving the text box.
Equation

Equation questions, such as the one shown in Figure 109, require the student to enter a mathematics equation or expression in a text field using an on-screen keypad.

Figure 109. Equation question

1. To navigate between the keypad buttons, the student presses the [Tab] key or [Shift] + [Tab]. JAWS reads aloud the character or action for each button.

2. To enter a character in the text field or perform an action from the keypad toolbar, the student presses the [Enter] key. The student can also press the corresponding key on the keyboard, if available.

3. Optional: To add special characters to the text field, the student presses [Alt] + [7], with the focus on the text field. A pop-up window opens, with a drop-down list of the available characters. To move between the options in this list, use the arrow keys. JAWS reads the name of each special character. To insert the selected character, press the [Enter] key.
Table Match

Table-match questions, like the sample question in Figure 110, require the student to mark at least one checkbox in a table. The table will have multiple rows and columns. The table row heading and column heading are not selectable. The selectable table cells have checkboxes.

![Table Match Example](image)

**Figure 110. Responding to a table-match question**

1. After listening to the question text, the student presses the [Tab] key twice. This takes the student to the first table cell that has a checkbox.
2. JAWS will read aloud the corresponding column name and row name for that table cell.
3. To navigate to each cell that has a checkbox, the student presses the [Tab] key.
4. JAWS will read aloud the corresponding column and row name for each cell.
5. To mark a checkbox, the student presses the [Spacebar].
Running NVDA Screen Reader 2018.1.1 with the Microsoft Take a Test Application for Windows

Users running the Take a Test app and NVDA screen reader version 2018.1.1 at the same time on Windows 10 and 10 in S mode with RS v1709 and v1803 are experiencing the Take a Test app crashing before a test is started. To prevent the Take a Test app from crashing while running the NVDA screen reader 2018.1.1, users should first update Windows 10 and 10 in S mode to at least RS v1809. Windows Updates can be accessed through the Search charm.

1. Open the Start menu.
2. Select the [Settings] button.
3. Select the [Update & Security] button (Figure 111).

![Figure 111. [Update & Security] button]
4. In the *Windows Update* screen, select the [Check for Updates] button (Figure 112).

![Windows Update screen](image)

**Figure 112. Windows Update screen**

5. If there are updates, select the [Download and install now] link to install any available updates.
Chapter 6. Appendices
User Support

Local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) or English Language Proficiency Assessments for California (ELPAC) coordinators should first contact the LEA technology coordinator or system administrator prior to contacting the California Technical Assistance Center (CalTAC).

Technology coordinators and CAASPP or ELPAC test site coordinators should contact their LEA CAASPP or ELPAC coordinators for assistance.

CalTAC for LEA CAASPP or ELPAC Coordinators

LEA CAASPP or ELPAC coordinators should provide as much detail as possible about the issue(s) encountered.

CalTAC
Hours: 7 a.m. to 5 p.m., Monday–Friday
Toll-Free Phone Support: 800-955-2954
Email Support: caltac@ets.org
Websites: http://www.caaspp.org/ and https://www.elpac.org

Always include the following information:

- Test administrator or test examiner name and information technology or network contact person and contact information
- Statewide Student Identifier(s) of affected students
- Session ID for the affected student test session
- Operating system and secure browser version information
- Any error messages and codes that appeared, if applicable
- Information about your network configuration:
  - Secure browser installation (to individual devices or network)
  - Wired or wireless internet network setup

⚠️ Warning: Never provide any other student information, as doing so may violate Family Educational Rights and Privacy Act policies.
Change Log

The Change Log table lists significant changes since the last version of this manual was released. Changes made to chapters 1 and 2 since the original posting in November 2019 are highlighted in the text.

<table>
<thead>
<tr>
<th>Change(s)</th>
<th>Section(s)</th>
<th>Date</th>
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<tbody>
<tr>
<td>Removed the California Alternate Assessment for Mathematics from the list of assessments with a calculator as an embedded universal tool.</td>
<td>Global</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Enhanced the definition to “Medical Device.”</td>
<td>Chapter 1. Introduction &gt; Manual Content &gt; What’s New in 2019–2020 &gt; General or All</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Updated links to such resources as California Assessment of Student Performance and Progress and English Language Proficiency Assessments for California (ELPAC) Test Operations Management User Guide.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Types of Resources</td>
<td>April 20, 2020</td>
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<tr>
<td>Added links to the CSA tutorials.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC (throughout)</td>
<td>April 20, 2020</td>
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<tr>
<td>Noted that the colors for the highlighter universal tool are presented in Spanish.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Universal Tools &gt; Embedded &gt; Highlighter</td>
<td>April 20, 2020</td>
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<td>Redefined list of examples of mathematics tools.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Universal Tools &gt; Embedded &gt; Mathematics Tools</td>
<td>April 20, 2020</td>
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<td>Added a note clarifying device and operating system compatibility to the permissive mode setting description.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Universal Tools &gt; Embedded &gt; Permissive Mode (Setting)</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Added a link to an additional resource.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Universal Tools &gt; Non-Embedded &gt; Test Navigation Assistant</td>
<td>April 20, 2020</td>
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### Change Log (continuation one)

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<td>Added “Summative ELPAC” to the list of approved assessments; amended the shortcut menu options.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Designated Supports &gt; Embedded &gt; Text-to-Speech</td>
<td>April 20, 2020</td>
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<tr>
<td>Added a link to an additional resource.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Designated Supports &gt; Non-Embedded &gt; Designated Interface Assistant (DIA)</td>
<td>April 20, 2020</td>
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<tr>
<td>Added an example.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Designated Supports &gt; Non-Embedded &gt; Medical Supports</td>
<td>April 20, 2020</td>
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<td>Clarified the list of approved assessments to allow for the ELPAC Writing domain only.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Designated Supports &gt; Non-Embedded &gt; Read-Aloud Items</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Updated the list and links for ELPAC translated test directions.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Designated Supports &gt; Non-Embedded &gt; Translated Test Directions</td>
<td>April 20, 2020</td>
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<tr>
<td>Expanded the description of the braille types</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Accommodations &gt; Embedded &gt; Braille</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Added a note clarifying device and operating system compatibility to the word prediction description.</td>
<td>Chapter 2. Accessibility Features for the CAASPP and Summative ELPAC &gt; Accommodations &gt; Embedded &gt; Word Prediction</td>
<td>April 20, 2020</td>
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### Change Log (continuation two)

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<td>Added all content.</td>
<td><a href="#">Chapter 3. Configuring Selected System and Third-Party Accessibility Resources</a></td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Added all content.</td>
<td><a href="#">Chapter 4. Testing Students with Accessibility Resources</a></td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Added all content.</td>
<td><a href="#">Chapter 5. Requirements for Testing Students with Visual Impairment</a></td>
<td>April 20, 2020</td>
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