Smarter Balanced Assessment Consortium:

Usability, Accessibility, and Accommodations Guidelines

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Introduction

The Smarter Balanced Assessment Consortium (Smarter Balanced) strives to provide every student with a positive and productive assessment experience, generating results that are a fair and accurate estimate of each student's achievement. Further, Smarter Balanced is building on a framework of accessibility for **all** students, including English Language Learners (ELLs), students with disabilities, and ELLs with disabilities, but not limited to those groups. In the process of developing its next-generation assessments to measure students' knowledge and skills as they progress toward college and career readiness, Smarter Balanced recognized that the validity of assessment results depends on each and every student having appropriate universal tools, designated supports, and accommodations when needed based on the constructs being measured by the assessment. This document was developed for the Smarter Balanced member states to guide the selection and administration of universal tools, designated supports, and accommodations.

The Smarter Balanced assessment is based on the Common Core State Standards (CCSS). Thus, the universal tools, designated supports, and accommodations that are appropriate for the Smarter Balanced assessment may be different from those that states allowed in the past. For the secure summative assessments, a state can only make available to students the universal tools, designated supports, and accommodations that are included in the *Smarter Balanced Usability, Accessibility, and Accommodations Guidelines.* A member state may elect **not to make available** to its students, any universal tool, designated support, or accommodation that is otherwise included in the *Guidelines* when the implementation or use of the universal tool, designated support, or accommodation is in conflict with a member state's law, regulation, or policy.

These *Guidelines* describe the Smarter Balanced universal tools, designated supports, and accommodations available for the Smarter Balanced assessments at this time (see Appendix A). The specific universal tools, designated supports, and accommodations approved by Smarter Balanced may change in the future if additional tools, supports or accommodations are identified for the assessment based on state experience and research findings. The Consortium will establish a standing committee, including members from Governing States that will review suggested additional universal tools, designated supports, and accommodations to determine if changes are warranted. Proposed changes to the list of universal tools, designated supports, and accommodations will be brought to Governing States for review, input, and vote for approval. Furthermore, states may issue temporary approvals (i.e., one summative assessment administration) for individual unique student accommodations. State leads will evaluate formal requests for unique accommodations and determine whether or not the request poses a threat to the measurement of the construct. Upon issuing a temporary approval, the State will send documentation of the approval to the Consortium. The Consortium will consider all state approved temporary accommodations as part of the annual Consortium accommodations review process. The Consortium will provide to member states a list of the temporary accommodations issued by states that are not Consortium approved accommodations.

Intended Audience and Recommended Use

The Smarter Balanced Assessment Consortium's *Usability, Accessibility, and Accommodations Guidelines* are intended for school-level personnel and decision-making teams, particularly Individualized Education Program (IEP) teams, as they prepare for and implement the Smarter Balanced assessment. The Guidelines provide information for classroom teachers, English

development educators, special education teachers, and related services personnel to use in selecting and administering universal tools, designated supports, and accommodations for those students who need them. The Guidelines are also intended for assessment staff and administrators who oversee the decisions that are made in instruction and assessment.

The Smarter Balanced *Guidelines* apply to **all** students. They emphasize an individualized approach to the implementation of assessment practices for those students who have diverse needs and participate in large-scale content assessments. This document focuses on universal tools, designated supports, and accommodations for the Smarter Balanced content assessments of English language arts/literacy and mathematics (math). At the same time, it supports important instructional decisions about accessibility and accommodations for students who participate in the Smarter Balanced assessments. It recognizes the critical connection between accessibility and accommodations in instruction and accessibility and accommodations during assessment. Professional development materials that support the *Guidelines* and this critical instruction-assessment link will be available in the Spring of 2014. The *Guidelines* also are supported by the Smarter Balanced Test Administration Manual.

Smarter Balanced Assessment Design

The Smarter Balanced Assessment Consortium has developed a system of valid, reliable, and fair next-generation assessments aligned to the CCSS in English language arts (ELA)/literacy and mathematics for grades 3-8 and 11. The system includes summative assessments for accountability purposes, optional interim assessments for local use, and formative tools and processes for instructional use. Computer adaptive testing technologies are used for the summative and interim assessments to provide meaningful feedback and actionable data that teachers and other stakeholders can use to help students succeed. For more information, visit www.smarterbalanced.org/smarter-balanced-assessments/.

Recognizing Access Needs in All Students

All students (including students with disabilities, ELLs, and ELLs with disabilities) are to be held to the same expectations for participation and performance on state assessments. Specifically, all students enrolled in grades 3-8 and 11 are required to participate in the Smarter Balanced mathematics assessment except:

- Students with the most significant cognitive disabilities who meet the criteria for the mathematics alternate assessment based on alternate achievement standards (approximately 1% or fewer of the student population).

All students enrolled in grades 3-8 and 11 are required to participate in the Smarter Balanced English language/literacy assessment except:

- Students with the most significant cognitive disabilities who meet the criteria for the English language/literacy alternate assessment based on alternate achievement standards (approximately 1% or fewer of the student population).
- ELLs who are enrolled for the first year in a U.S. school. These students instead participate in their state's English language proficiency assessment.

Federal laws governing student participation in statewide assessments include the Elementary and Secondary Education Act (ESEA) (reauthorized as the No Child Left Behind Act of 2001 – NCLB), the

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), and Section 504 of the Rehabilitation Act of 1973 (reauthorized in 2008).

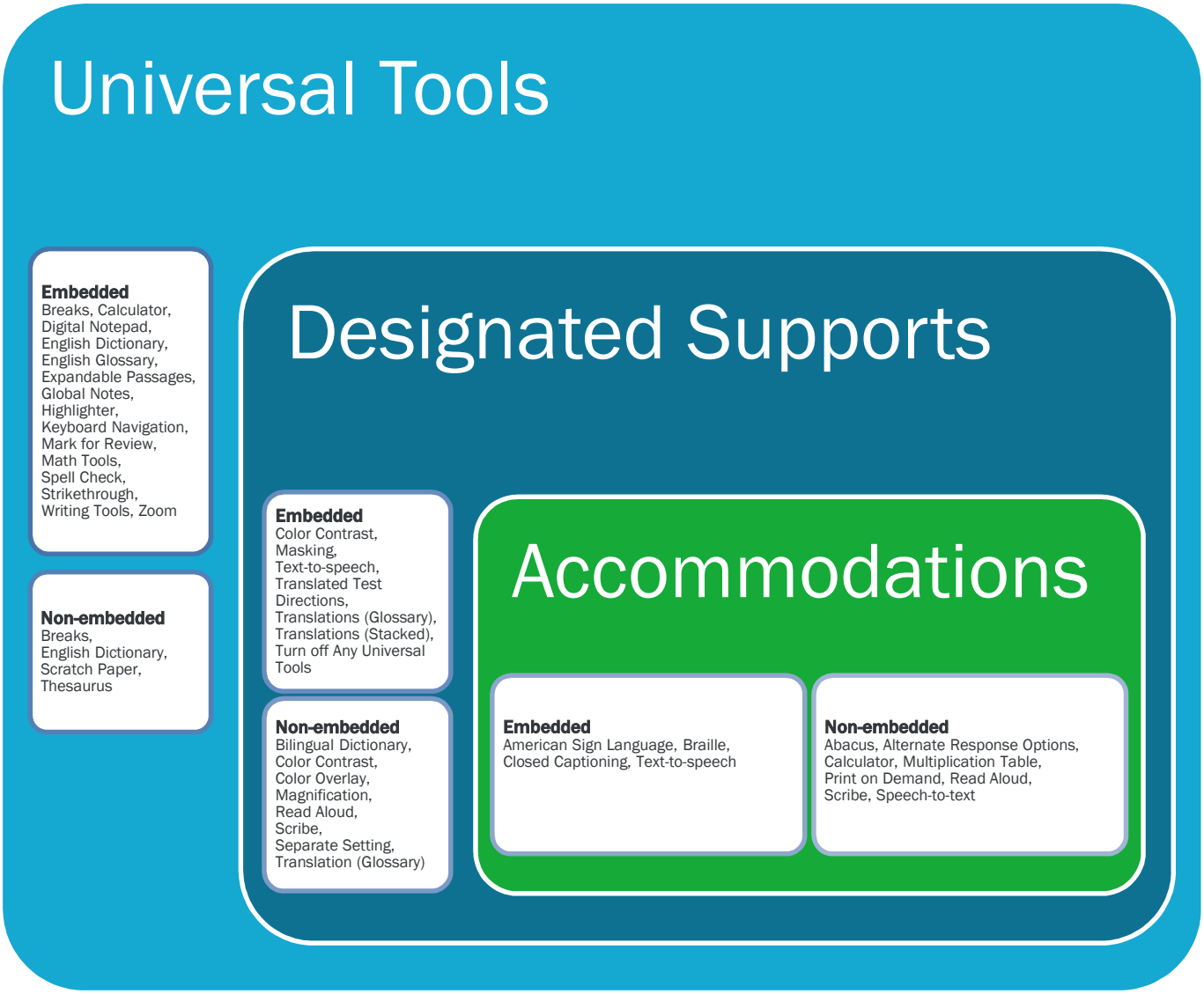
Recognizing the diverse characteristics and needs of students who participate in the Smarter Balanced assessments, the Smarter Balanced states worked together through the Smarter Balanced Test Administration and Student Access Work Group to develop an *Accessibility and Accommodations Framework* that guided the consortium as it worked to reach agreement on the specific tools, supports, and accommodations available for the assessment. The Work Group also considered research-based lessons learned about universal design, accessibility tools, and accommodations (see Appendix B).

The conceptual model that serves as the basis for the *Usability, Accessibility, and Accommodations Guidelines* is shown in Figure 1. This figure portrays several aspects of the Smarter Balanced assessment features – universal tools (available for all students), designated supports (available when indicated by an adult or team), and accommodations (available need is documented in an Individualized Education Program – IEP or 504 plan). It also portrays the additive and sequentially-inclusive nature of these three aspects. Universal tools are available to all students, including those receiving designated supports and those receiving accommodations. Designated supports are available only to students for whom an adult or team has indicated the need for these accommodations (as well as those students for whom the need is documented). Accommodations are available only to those students with documentation of the need through a formal plan (i.e., IEP). Those students also may use designated supports and universal tools.

A universal tool for one content focus may be an accommodation for another content focus (see, for example, calculator). Similarly, a designated support may also be an accommodation, depending on the content target (see, for example, scribe). This approach is consistent with the emphasis that Smarter Balanced has placed on the validity of assessment results coupled with access. **Universal tools, designated supports, and accommodations all yield valid scores that count as participation in statewide assessments when used in a manner consistent with the *Guidelines.***

Also, as shown in Figure 1, for each category of assessment features – universal tools, designated supports, and accommodations – there exist both embedded and non-embedded versions of the tools, supports, or accommodations depending on whether they are provided as digitally-delivered components of the test administration system or separate from it.

Figure 1: Conceptual Model Underlying the Smarter Balanced *Usability, Accessibility, and Accommodations Guidelines*



The Conceptual Model recognizes that all students should be held to the same expectations for instruction in CCSS and have available to them universal accessibility features. It also recognizes that some students may have certain characteristics and access needs that require the use of accommodations for instruction and when they participate in the Smarter Balanced assessments.

These *Guidelines* present the current universal tools, designated supports, and accommodations adopted by the Smarter Balanced states to ensure valid assessment results for all students taking its assessments.

Structure of This Document

This document is divided into several parts:

- **Introduction:** This section introduces the document and the conceptual model that is the basis for the universal tools, designated supports, and accommodations in the *Guidelines*.
- **Section I:** This section features the Consortium's universal tools.
- **Section II:** This section features the designated supports available on Smarter Balanced assessments.
- **Section III:** This section features the accommodations available on Smarter Balanced assessments.
- **Appendix A:** This appendix provides a summary list of Smarter Balanced's universal tools, designated supports, and accommodations.
- **Appendix B:** This appendix describes lessons learned from research on universal design, accessibility tools, and accommodations.

Section I: Smarter Balanced Universal Tools

What Are Universal Tools?

Universal tools are access features of the assessment that are either provided as digitally-delivered components of the test administration system or separate from it. Universal tools are available to all students based on student preference and selection.

Embedded Universal Tools

The Smarter Balanced digitally-delivered assessments include a wide array of embedded universal tools. These are available to all students as part of the technology platform.

Table 1 lists the embedded universal tools available to all students for computer administered Smarter Balanced assessments. It includes a description of each tool. Although these tools are generally available to all students, educators may determine that one or more might be distracting for a particular student, and thus might indicate that the tool should be turned off for the administration of the assessment to the student (see Section II – Designated Supports).

Table 1: Embedded Universal Tools Available to All Students

Universal Tool	Description
Breaks	The number of items 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 items 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.
Calculator (for calculator-allowed items only) (See Non-embedded Accommodations for students who cannot use the embedded calculator)	An embedded on-screen digital calculator can be accessed for calculator-allowed items when students click on the calculator button. This tool is available only with the specific items for which the Smarter Balanced Item 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).
Digital notepad	This tool is used for making notes about an item. The digital notepad is item-specific and is available through the end of the test segment. Notes are not saved when the student moves on to the next segment or after a break of more than 20 minutes.
English Dictionary (for ELA-performance task full writes)	An English dictionary **may** be available for the full write portion of an ELA performance task, **pending contractual discussions**. A full write is the second part of a performance task. The use of this universal tool may result in the student needing additional overall time to complete the assessment.
English glossary	Grade- and context-appropriate definitions of specific construct-irrelevant terms are shown in English on the screen via a pop-up window. The student can access the embedded glossary by clicking on any of the pre-selected terms. The use of this accommodation may result in the student needing additional overall time to complete the assessment.
Expandable passages	Each passage or stimulus can be expanded so that it takes up a larger portion of the screen.
Global notes (for ELA performance tasks)	Global notes is a notepad that is available for ELA performance tasks in which students complete a full write. A full write is the second part of a performance task. The student clicks on the notepad icon for the notepad to appear. During the ELA performance tasks, the notes are retained from segment to segment so that the student may go

Universal Tool	Description
	back to the notes even though the student is not able to go back to specific items in the previous segment.
Highlighter	A digital tool for marking desired text, item questions, item answers, or parts of these with a color. Highlighted text remains available throughout each test segment.
Keyboard navigation	Navigation throughout text can be accomplished by using a keyboard.
Mark for review	Allows students to flag items for future review during the assessment. Markings are not saved when the student moves on to the next segment or after a break of more than 20 minutes.
Math tools	These digital tools (i.e., embedded ruler, embedded protractor) are used for measurements related to math items. They are available only with the specific items for which the *Smarter Balanced Item Specifications* indicate that one or more of these tools would be appropriate.
Spell check (for ELA items)	Writing tool for checking the spelling of words in student-generated responses. Spell check only gives an indication that a word is misspelled; it does not provide the correct spelling. This tool is available only with the specific items for which the Smarter Balanced Item Specifications indicated that it would be appropriate. 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.
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.
Writing tools	Selected writing tools (i.e., bold, italic, bullets, undo/redo) are available for all student-generated responses. (Also see spell check.)
Zoom	A tool for making text or other graphics in a window or frame appear larger on the screen. The default font size for all tests is 14 pt. The student can make text and graphics larger by clicking the *Zoom In* button. The student can click the *Zoom Out* button to return to the default or smaller print size. When using the zoom feature, the student only changes the size of text and graphics on the current screen. To increase the default print size of the entire test (from 1.5X to 3.0X default size), the print size must be set for the student in the Test Information Distribution Engine (TIDE, or state's comparable platform), or set by the test administrator prior to the start of the test. This is the only feature that test administrators can set. The use of this universal tool may result in the student needing additional overall time to complete the assessment.

Non-embedded Universal Tools

Some universal tools may need to be provided outside of the computer test administration system. These tools, shown in Table 2, are to be provided locally for those students. They can be made available to any student.

Table 2: Non-embedded Universal Tools Available to All Students

Universal Tool	Description
Breaks	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 universal tool may result in the student needing additional overall time to complete the assessment.
English Dictionary (for ELA-performance task full writes)	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 universal

Universal Tool	Description
	tool may result in the student needing additional overall time to complete the assessment.
Scratch paper	Scratch paper to make notes, write computations, or record responses may be made available. All scratch paper must be collected and securely destroyed at the end of each assessment session to maintain test security. Only plain paper or lined paper is appropriate for ELA. Graph paper is required beginning in sixth grade and can be used on all math assessments. A student can use an assistive technology device for scratch paper as long as the device is certified.[1]
Thesaurus (for ELA-performance task full writes)	A thesaurus contains synonyms of terms while a student interacts with text included in the assessment. A full write is the second part of a performance task. The use of this universal tool may result in the student needing additional overall time to complete the assessment.

Appendix A provides a summary of universal tools, designated supports, and accommodations (both embedded and non-embedded) available for the Smarter Balanced assessments.

[1] Smarter Balanced is working closely with our test administration platform vendor to create a process through which assistive technology devices can be certified. Certification ensures that the device functions properly and appropriately addresses test security.

Section II: Smarter Balanced Designated Supports

What Are Designated Supports?

Designated supports for the Smarter Balanced assessments are those features that are available for use by **any student** for whom the need has been indicated by an educator (or team of educators with parent/guardian and student). Scores achieved by students using designated supports will be included for federal accountability purposes. It is recommended that a consistent process be used to determine these supports for individual students. All educators making these decisions should be trained on the process and should be made aware of the range of designated supports available. Smarter Balanced states have identified digitally-embedded and non-embedded designated supports for students for whom an adult or team has indicated a need for the support.

Designated supports need to be identified prior to assessment administration. Embedded and non-embedded supports must be entered into the Test Information Distribution Engine (TIDE, or state's comparable platform). Any non-embedded designated supports must be acquired prior to testing.

Who Makes Decisions About Designated Supports?

Informed adults make decisions about designated supports. Ideally, the decisions are made by all educators familiar with the student's characteristics and needs, as well as those supports that the student has been using during instruction and for other assessments. Student input to the decision, particularly for older students, is also recommended.

Forthcoming professional development materials to be available through Smarter Balanced will provide suggestions of processes that may be used if a district or school does not have an existing process in place for adults and others to make decisions about designated supports. The use of an *Individual Student Assessment Accessibility Profile (ISAAP)*, created and provided by Smarter Balanced, is one process that may be used to determine which designated supports should be available for an individual student. Schools may choose to use another decision-making process. **Regardless of the process used, all embedded designated supports must be activated prior to testing by entering information in the TIDE, or state's comparable platform**.

Embedded Designated Supports

Table 3 lists the embedded designated supports available to all students for whom the need has been indicated. It includes a description of each support along with recommendations for when the support might be needed.

Table 3: Embedded Designated Supports

Designated Support	Description	Recommendations for Use
Color contrast	Enable students to adjust screen background or font color, based on student needs or preferences. This may include reversing the colors for the entire interface or choosing the color of font and background.	Students with attention difficulties may need this support for viewing test content. It also may be needed by some students with visual impairments or other print disabilities (including learning disabilities). Choice of colors should be informed by evidence that color selections meet the student's needs.
Masking	Masking involves blocking off content that is not of immediate need or that may be	Students with attention difficulties may need to mask content not of immediate need or that

Designated Support	Description	Recommendations for Use
	distracting to the student. Students are able to focus their attention on a specific part of a test item by masking.	may be distracting during the assessment. This support also may be needed by students with print disabilities (including learning disabilities) or visual impairments. Masking allows students to hide and reveal individual answer options, as well as all navigational buttons and menus.
Text-to-speech (for math items and ELA items, not for reading passages)[2] (See Embedded Accommodations for ELA passages)	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.	Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud. This support also may be needed by students with reading-related disabilities, or by students who are blind and do not yet have adequate braille skills. This support will likely be confusing and may impede the performance of students who do not regularly have the support during instruction. Students who use text-to-speech will need headphones unless tested individually in a separate setting.
Translated test directions (for math items)	Translation of test directions is a language support available prior to beginning the actual test items. Students can see test directions in another language.	Students who have limited English language skills can use the translated directions support. This support should only be used for students who are proficient readers in the other language and not proficient in English.
Translations (glossaries) (for math items)	Translated glossaries are a language support. The translated glossaries are provided for selected construct-irrelevant terms for math. Translations for these terms appear on the computer screen when students click on them.	Students who have limited English language skills (whether or not designated as ELLs or ELLs with disabilities) can use the translation glossary for specific items. The use of this support may result in the student needing additional overall time to complete the assessment.
Translations (stacked) (for math items)	Stacked translations are a language support. Stacked translations are available for some students; stacked translations provide the full translation of each test item above the original item in English.	For students whose primary language is not English and who use dual language supports in the classroom, use of the stacked (dual language) translation may be appropriate. Students participate in the assessment regardless of the language. This support will increase reading load and cognitive load. The use of this support may result in the student needing additional overall time to complete the assessment.
Turn off any universal tools	Disabling any universal tools that might be distracting or that students do not need to use, or are unable to 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 tools may be distracting is important for determining which tools to turn off.

[2] See Embedded Accommodations for guidelines on the use of Text-to-speech for ELA passages.

Non-embedded Designated Supports

Some designated supports may need to be provided outside of the digital-delivery system. These supports, shown in Table 4, are to be provided locally for those students unable to use the designated supports when provided digitally.

Table 4: Non-embedded Designated Supports

Designated Support	Description	Recommendations for Use
Bilingual dictionary (for ELA-performance task full writes)	A bilingual/dual language word-to-word dictionary is a language support. A bilingual/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.	For students whose primary language is not English and who use dual language supports in the classroom, use of a bilingual/dual language word-to-word dictionary may be appropriate. Students participate in the assessment regardless of the language. The use of this support may result in the student needing additional overall time to complete the assessment.
Color contrast	Test content of online items may be printed with different colors.	Students with attention difficulties may need this support for viewing the test when digitally-provided color contrasts do not meet their needs. Some students with visual impairments or other print disabilities (including learning disabilities) also may need this support. Choice of colors should be informed by evidence of those colors that meet the student's needs.
Color overlays	Color transparencies are placed over a paper-based assessment.	Students with attention difficulties may need this support to view test content. This support also may be needed by some students with visual impairments or other print disabilities (including learning disabilities). Choice of color should be informed by evidence of those colors that meet the student's needs.
Magnification	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 allows increasing the size to a level not provided for by the Zoom universal tool.	Students used to viewing enlarged text or graphics, or navigation buttons may need magnification to comfortably view content. This support also may meet the needs of students with visual impairments and other print disabilities. The use of this designated support may result in the student needing additional overall time to complete the assessment.
Read aloud (for math items and ELA items, not for reading passages) (See Non-embedded Accommodations for ELA passages)	Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided in the *Smarter Balanced Test Administration Manual*. All or portions of the content may be read aloud.	Students who are struggling readers may need assistance accessing the assessment by having all or portions of the assessment read aloud. This support also may be needed by students with reading-related disabilities, or by students who are blind and do not yet have adequate braille skills. If not used regularly during instruction, this support 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

Designated Support	Description	Recommendations for Use
		option of asking a reader to slow down or repeat text. The use of this support may result in the student needing additional overall time to complete the assessment.
Scribe (for ELA non-writing items and math items)[3] (See Accommodations for Writing)	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 *Smarter Balanced Test Administration Manual.*	Students who have documented significant motor or processing difficulties, or who have had a recent injury (such as a broken hand or arm) that make 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 support may result in the student needing additional overall time to complete the assessment.
Separate setting	Test location is altered so that the student is tested in a setting different from that made available for most students.	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 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). Some students may benefit from being in an environment that allows for movement, such as being able to walk around. In some instances, students may need to interact with instructional or test content outside of school, such as in a hospital or their home.
Translations (glossaries) (for math items)	Translated glossaries are a language support. Translated glossaries are provided for selected construct-irrelevant terms for math. Glossary terms are listed by item and include the English term and its translated equivalent.	Students who have limited English language skills can use the translation glossary for specific items. The use of this support may result in the student needing additional overall time to complete the assessment.

Appendix A provides a summary of universal tools, designated supports, and accommodations (both embedded and non-embedded) available for the Smarter Balanced assessments.

[3] See Accommodations for use of Scribe for Writing items

Section III: Smarter Balanced Accommodations

What Are Accommodations?

Accommodations are changes in procedures or materials that increase equitable access during the Smarter Balanced assessments. Assessment accommodations generate valid assessment results for students who need them; they allow these students to show what they know and can do. Smarter Balanced states have identified digitally-embedded and non-embedded **accommodations** for students for whom there is documentation of the need for the accommodations on an Individualized Education Program (IEP) or 504 accommodation plan. One exception to the IEP or 504 requirement is for students who have had a physical injury (e.g., broken hand or arm) that impairs their ability to use a computer. These students may use the speech-to-text or the scribe accommodations (if they have had sufficient experience with the use of these), as noted in this section.

Determination of which accommodations an individual student will have available for the assessment is necessary because these accommodations must be made available before the assessment, either by entering information into the TIDE, or state's comparable platform, for embedded accommodations, or by ensuring that the materials or setting are available for the assessment for non-embedded accommodations.

The Smarter Balanced Test Administration and Student Access Workgroup recognized that accommodations could increase cognitive load or create other challenges for students who do not need them or who have not had experience using them. Because of this possibility, Smarter Balanced states agreed that **a student's parent/guardian should know about the availability of specific accommodations through a parent/guardian report. This would ensure that parents/guardians are aware of the conditions under which their child participated in the assessment. Information included in the parent/guardian report should not be the basis for any educational decisions (such as eligibility for an Advanced Placement class) nor for documenting/reporting the use of the accommodation elsewhere (such as on a transcript).**

Who Makes Decisions About Accommodations?

IEP teams and educators make decisions about accommodations. These teams (or educators for 504 plans) provide evidence of the need for accommodations and ensure that they are noted on the IEP or 504 plan.

The IEP team (or educator developing the 504 plan) is responsible for ensuring that information from the IEP is entered into the TIDE, or state's comparable platform, so that all embedded accommodations can be activated prior to testing. This can be accomplished by identifying one person from the team to enter information into the TIDE, or state's comparable platform, or by providing information to the test coordinator who enters into the TIDE, or state's comparable platform, a form that lists all accommodations and designated supports needed by individual students on IEPs or 504 plans.

Embedded Accommodations

Table 5 lists the embedded accommodations available for the Smarter Balanced assessments for those students for whom the accommodations are included on an IEP or 504 plan. The table includes a description of each accommodation along with recommendations for when the accommodation might be needed and how it can be used. For those accommodations that may be considered controversial, a description of considerations about the use of the accommodation is provided.

Table 5: Embedded Accommodations

Accommodation	Description	Recommendations for Use
American Sign Language (ASL) (for ELA Listening items and math items)	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.	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.
Braille	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 and non-contracted braille is available; Nemeth code is available for math.	Students with visual impairments 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 because Nemeth Code is not available via refreshable braille. For math, braille will be presented via embosser; embosser-created braille can be used for ELA also. The type of braille presented to the student (contracted or non-contracted) is set in TIDE, or state's comparable platform. The use of this accommodation may result in the student needing additional overall time to complete the assessment.
Closed captioning (for ELA listening items)	Printed text that appears on the computer screen as audio materials are presented.	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 support 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

Accommodation	Description	Recommendations for Use
		interfere with clear presentation of the audio presentation in a listening test.
Text-to-speech (for ELA reading passages)	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.	**This accommodation is appropriate for a very small number of students (estimated to be approximately 1-2% of students with disabilities participating in a general assessment).** • For students in grades 3 - 5, text-to-speech will not be an available accommodation. Content experts agree that this accommodation should not be provided during these grades because it would compromise the construct being measured. • For students in grades 6 – 8 and 11, text-to-speech is available as an accommodation for students whose need is documented in an IEP or 504 plan. Reports can be run to indicate the percent of students who had access to text-to-speech on reading test passages. Students who use text-to-speech will need headphones unless tested individually in a separate setting.

Non-embedded Accommodations

Table 6 lists the non-embedded accommodations available for the Smarter Balanced assessments for those students for whom the accommodations are documented on an IEP or 504 plan. The table includes a description of each accommodation, along with recommendations for when the accommodation might be needed and how it can be used. For those accommodations that may be considered controversial, a description of considerations about the use of the accommodation is provided.

Table 6: Non-embedded Accommodations Available

Accommodation	Description	Recommendations for Use
Abacus	This tool may be used in place of scratch paper for students who typically use an abacus.	Some students with visual impairments who typically use an abacus may use an abacus in place of using scratch paper.
Alternate response options	Alternate response options include but are not limited to adapted keyboards, large keyboards, StickyKeys, MouseKeys, FilterKeys, adapted mouse, touch screen, head wand, and switches.	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.
Calculator	A non-embedded calculator for students needing a special calculator, such as a braille calculator or a talking calculator,	Students with visual impairments who are unable to use the embedded calculator for calculator-allowed items will be able to use the calculator that they typically use, such as a

Accommodation	Description	Recommendations for Use
(for calculator allowed items only)	currently unavailable within the assessment platform.	braille calculator or a talking calculator. Test administrators should ensure that the calculator is available only for designated calculator items.
Multiplication Table (grade 4 and above math items)	A paper-based single digit (1-9) multiplication table will be available from Smarter Balanced for reference.	For students with a documented and persistent calculation disability (i.e., dyscalculia).
Print on demand	Paper copies of either passages/stimuli and/or items are printed for students. For those students needing a paper copy of a passage or stimulus, permission for the students to request printing must first be set in TIDE, or state's comparable platform. For those students needing a paper copy of one or more items, the Smarter Balanced Help Desk (1-866-815-7246) must be contacted by the school or district coordinator to have the accommodation set for the student.	Some students with disabilities may need paper copies of either passages/stimuli and/or items. 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.
Read aloud (for ELA **passages**, grades 6-8 and 11; **blind students in grades 3-8 and 11 who do not yet have adequate braille skills)**	Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided in the *Smarter Balanced Test Administration Manual*. All or portions of the content may be read aloud.	**This accommodation is appropriate for a very small number of students (estimated to be approximately 1-2% of students with disabilities participating in a general assessment).** • For students in grades 3 - 5, read aloud will not be an available accommodation. Content experts agree that this accommodation should not be provided during these grades because it would compromise the construct being measured. • For students in grades 6 – 8 and 11, read aloud is available as an accommodation for students whose need is documented in an IEP or 504 plan. Reports can be run to indicate the percent of students who had access to read aloud on reading test passages. 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.
Scribe (See Designated Supports for math and non-writing ELA)	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 *Smarter Balanced Test Administration Manual.*	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,

Accommodation	Description	Recommendations for Use
		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	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.	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 make 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 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.

Resources

Christensen, L., Carver, W., VanDeZande, J., & Lazarus, S. (2011). *Accommodations manual: How to select, administer, and evaluate the use of accommodations for instruction and assessment of students with disabilities (3rd ed.).* Washington, DC: Assessing Special Education Students State Collaborative on Assessment and Student Standards, Council of Chief State School Officers.

Christensen, L., Shyyan, V., Schuster, T., Mahaley, P., & Saez, S. (2012). *Accommodations manual: How to select, administer, and evaluate use of accommodations for instruction and assessment of English language learners.* Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

Fedorchak, G. (2012). *Access by Design – Implications for equity and excellence in education*. Draft paper prepared for the Smarter Balanced Assessment Consortium.

Measured Progress. (2013). *Framework for Accessibility and Accommodations.* Smarter Balanced Assessment Consortium. (Forthcoming Spring 2014)

National Center on Educational Outcomes. (2009). *Accommodations bibliography.* Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Available at: https://apps.cehd.umn.edu/nceo/accommodations/

National Council on Measurement in Education. (2012). *Testing and data integrity in the administration of statewide student assessment programs.*

Professional Development Module. (Forthcoming Spring 2014)

Shyyan, V., Christensen, L., Touchette, B., Lightborne, L., Gholson, M., & Burton, K. (2013). *Accommodations manual: How to select, administer, and evaluate use of accommodations for instruction and assessment of English language learners with disabilities.* Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

Smarter Balanced. (2012). *Translation accommodations framework for testing ELLs in mathematics.* Available at: http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/09/Translation-Accommodations-Framework-for-Testing-ELL-Math.pdf

Smarter Balanced. (2012). *Accommodations for English Language Learners and Students with Disabilities: A research-based decision algorithm*. Available at: http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/08/Accomodations-for-under-represented-students.pdf

Appendix A: Summary of Smarter Balanced Universal Tools, Designated Supports, and Accommodations

	Universal Tools	Designated Supports	Accommodations
Embedded	Breaks Calculator[1] Digital Notepad English Dictionary[2] English Glossary Expandable Passages Global Notes Highlighter Keyboard Navigation Mark for Review Math Tools[3] Spell Check[4] Strikethrough Writing Tools[5] Zoom	Color Contrast Masking Text-to-Speech[6] Translated Test Directions[7] Translations (Glossary)[8] Translations (Stacked)[9] Turn off Any Universal Tools	American Sign Language[10] Braille Closed Captioning[11] Text-to-Speech[12]
Non-embedded	Breaks English Dictionary[13] Scratch Paper Thesaurus[14]	Bilingual Dictionary[15] Color Contrast Color Overlay Magnification Read Aloud Scribe[16] Separate Setting Translations (Glossary)[17]	Abacus Alternate Response Options[18] Calculator[19] Multiplication Table[20] Print on Demand Read Aloud Scribe Speech-to-Text

*Items shown are available for ELA and Math unless otherwise noted.

[1] For calculator-allowed items only
[2] For ELA performance task full-writes
[3] Includes embedded ruler, embedded protractor
[4] For ELA items
[5] Includes bold, italic, underline, indent, cut, paste, spell check, bullets, undo/redo.
[6] For ELA items (not reading passages) and math items
[7] For math items
[8] For math items
[9] For math test
[10] For ELA listening Items and math items
[11] For ELA listening items
[12] For ELA reading passages grades 6-8 and 11
[13] For ELA performance task full-writes
[14] For ELA performance task full-writes
[15] For ELA performance task full-writes
[16] For ELA non-writing items and math items
[17] For math items
[18] Includes adapted keyboards, large keyboards, StickyKeys, MouseKeys, FilterKeys, adapted mouse, touch screen, head wand, and switches.
[19] For calculator-allowed items only
[20] For math items beginning in grade 4.

Appendix B: Research-based Lessons Learned about Universal Design, Accessibility Tools, and Accommodations

More than half of all states in the United States participated in research spurred by the opportunity that states had to develop alternate assessments based on modified achievement standards (AA-MAS). The research conducted since 2007 provides numerous findings that are relevant to the next generation assessments. Lessons learned from this research that are relevant to the Smarter Balanced assessment system are highlighted here[i]

Who might benefit from accessibility features identified by AA-MAS research?

Several studies explored the characteristics of students who might benefit from an AA-MAS and the accessibility features incorporated in the assessment. These studies consistently found:

- Students with and without Individualized Education Programs (IEPs) and 504 plans would likely benefit from assessments with increased accessibility features.
- Students identified for the AA-MAS or who were among the lowest performing students in a state tended to be males, ethnic or racial minorities, English language learners, or from low socioeconomic backgrounds.
- Students identified for the AA-MAS tended to have difficulty with:
  - Print materials
  - High vocabulary load materials
  - Directions
  - Multi-step problem solving
- Students identified for the AA-MAS tended to have:
  - Distractibility
  - Limited meta-cognitive skills
  - Poor organizational skills
  - Poor self-monitoring skills
  - Slower work pace
  - Limited working memory capacity

What changes can be made to test items and tests that do not change the construct being assessed?

Many studies examined the effects of changes to test items or the tests themselves. Among those changes that did not violate the construct were:

- Enhanced directions
- Increased size of text and visuals
- Increased white space
- Simplified formats, including simplified visuals
- Underlining

Among those changes that might not violate the construct, depending on how the construct was specifically defined, were:

- Adding visuals
- Bolding text
- Simplifying language in item stems
- Changing distractors by editing the attractive distractor or changing the order of distractors
- Chunking text by embedding questions within a passage
- Reordering items
- Providing thought questions or hint boxes
- Scaffolding for vocabulary, definition, context, inference, or complex questions

Other findings highlighted the need for individualized decisions about some accessibility features. For example:

- Read-aloud features are differentially effective for and preferred by students
- Some features increase engagement and motivation in students
- Too many features can be confusing to students

Researchers found that students needed to have the opportunity to practice new item types and new accessibility features. In addition, their research emphasized the benefits of cognitive labs and item tryouts with students.

What can test developers do to build on the lessons learned from AA-MAS research and implementation?

Many studies and AA-MAS implementation efforts pointed to considerations for test developers. For example:

- Require item-writer training that focuses on universal design and accessibility principles
- Develop items from scratch rather than attempting to modify existing items to increase universal design and accessibility characteristics
- Ensure that all users understand the purpose of the assessment through professional development activities
- Always consider format changes that might increase the accessibility of items and tests, but make changes to content and cognitive load only after careful delineation of the purpose and content targets of the assessment.
- Engage in research on the effects of individual changes and combinations of changes intended to increase universal design and accessibility.
- Implement innovative items with caution, and only after exploring the accessibility implications of the innovative items.

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[i] The research used to develop this summary was highlighted in the document *Lessons Learned in Federally Funded Projects That Can Improve the Instruction and Assessment of Low Performing Students with Disabilities,* edited by M. Thurlow, S. Lazarus, and S. Bechard (2012), available at www.nceo.info/OnlinePubs/LessonsLearned.pdf, and presentations by the authors of three of the chapters in the *Lessons Learned* report, Sue Bechard, Vince Dean, Sheryl Lazarus, and Shelly Loving-Ryder, along with representatives from the two general assessment consortia (PARCC – Tamara Reavis; Smarter Balanced – Magda Chia).