



DIAMOND

DATA INFORMED ACCESSIBILITY: MAKING
OPTIMAL NEEDS-BASED DECISIONS

White Paper on Common Accessibility Language for States and Assessment Vendors

By Vitaliy V. Shyyan, Martha L. Thurlow, Erik D. Larson, Laurene L. Christensen,
and Sheryl S. Lazarus

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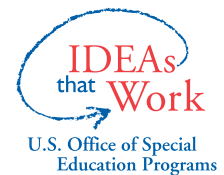
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NCEO Core Staff

Martha L. Thurlow, Director
Deb A. Albus
Laurene L. Christensen
Linda Goldstone
Sheryl S. Lazarus
Kristi K. Liu

Michael L. Moore
Rachel F. Quenemoen
Christopher Rogers
Vitaliy V. Shyyan
Yi-Chen Wu

National Center on Educational Outcomes
University of Minnesota • 207 Pattee Hall
150 Pillsbury Dr. SE • Minneapolis, MN 55455
Phone 612/626-1530 • Fax 612/624-0879
<http://www.nceo.info>

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The purpose of this White Paper is to address considerations for developing common accessibility language used in testing. Recent approaches to providing accessibility features and accommodations optimize assessment opportunities for greater numbers of previously ineligible students who may not have used accommodations in the past but who would benefit from new accessibility features built into testing platforms. With the variety of accessibility supports and the different ways of executing and labeling them comes the need to develop common terminology. This common terminology should be understandable to all educational stakeholders so that it can lay the foundation for helping every student succeed on his or her path to college and career readiness.

The need for this paper was identified through the Data Informed Accessibility—Making Optimal Needs-based Decisions (DIAMOND) project—a nine-state collaborative with the goal of developing guidelines for making informed decisions about accessibility features and accommodations. Discussions with this collaborative, as well as subsequent communication with other state education agency personnel, made it clear that students, parents, educators, policymakers, states, assessment consortia, assessment vendors, and other stakeholders needed common terminology for various aspects of accessibility.

This White Paper is organized into four sections. First, we discuss the accessibility paradigm shift that has been occurring in recent years. Second, we describe how different groups of stakeholders may benefit from common accessibility terminology. Third, we highlight current contextual trends relevant to accessibility features and accommodations and address the variability in the language used by various stakeholders. Fourth, we provide considerations and recommendations for developing common accessibility language among states, assessment vendors, and other educational stakeholders.

Accessibility Paradigm Shift

A paradigm shift has occurred in the approach that states are taking to ensure the accessibility of their assessments for all students. This paradigm shift occurred without requirements in federal laws such as the Elementary and Secondary Education Act, reauthorized as the *No Child Left Behind Act* of 2001–NCLB (signed in 2002), and the *Individuals with Disabilities Education Act*–IDEA (reauthorized in 2004). The paradigm shift was heralded by the Race-to-the-Top Assessments funding initiative in 2010, which funded consortia of states to develop innovative, more rigorous assessments based on common college- and career-ready standards and required that the assessments be accessible for a wide range of students.

Accessibility is now considered not only for those students who in the past had access to various accessibility features and accommodations (i.e., students with disabilities, English learners

[ELs], and ELs with disabilities), but also for those who had not had access to accommodations or other accessibility features (i.e., other general education students).

Consortia of states and individual states developing technology-based assessments embarked on opening up the concept of accessibility to all students, not just those students who had disabilities or who were ELs. Assessment consortia were guided by the principles of universal design (Christensen, Shyyan, & Johnstone, 2014; Thompson, Thurlow, & Malouf, 2004; Thurlow, Lazarus, Albus, & Hodgson, 2010), developing assessments for the widest range of students from the beginning while maintaining the validity of results generated by the assessment. Terms like “universal features,” “designated supports,” or “accessibility features identified in advance” were created to indicate the new approaches to accessibility open to all students. Each of the two general assessment consortia¹ addressed this requirement by developing assessments that had three levels of accessibility, in addition to a set of best practices for test administration. Other consortia funded later to develop an alternate assessment based on alternate achievement standards (AA-AAS)² and to develop an English language proficiency (ELP) assessment³ also created levels of accessibility for their students. Appendix A includes a comparison of the terminology for the levels of accessibility currently employed by the assessment consortia.

In December 2015, when the Elementary and Secondary Education Act was reauthorized as the *Every Student Succeeds Act* (ESSA), there was a general recognition that accessibility needed to be a tenet of state assessments, although it was specifically mentioned only in reference to innovative assessments. Nevertheless, the peer review process for assessments clearly required documentation of the accessibility features and accommodations of assessments to be approved for Title I accountability (U.S. Department of Education, 2015b).

The emphasis on accessibility and accommodations is a natural consequence of federal requirements for the inclusion of all students in state- and district-wide assessments. It was furthered by the confirmation that all students are to work toward grade-level content standards that are aligned with college and career readiness, based either on grade-level achievement standards (for nearly all students) or alternate achievement standards (only for those students with the most significant cognitive disabilities) (U.S. Department of Education, 2015a).

For students with documented needs, educators now are asked to use technology-based planning tools such as a Personal Needs Profile (PNP)⁴ to identify designated features that should be provided for them on assessments. For many educators, particularly general education teachers, this is a new decision-making process that will be enhanced if multiple assessment platforms employ common terminology. Such planning tools are also used for selecting accommodations

¹Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (Smarter Balanced).

²Dynamic Learning Maps (DLM) and National Center and State Collaborative (NCSC). NCSC is now the Multi-State Alternate Assessment (MSAA).

³English Language Proficiency Assessment for the 21st Century (ELPA21) and WIDA.

⁴Smarter Balanced uses the term *Individual Student Assessment Accessibility Profile (ISAAP)* for its PNP.

and have implications for educators serving on Individualized Education Program (IEP), Section 504, and—in some states—EL teams.

Who Are the Stakeholders?

There are multiple groups of stakeholders who have an interest in common accessibility language. These stakeholder groups include all students who use accessibility features and accommodations; all parents of these students; all teachers and administrators who work with these students; and policymakers who determine which features and accommodations are available. These groups also include the states, assessment consortia, assessment vendors, and other entities that develop and administer these assessments.

Accessibility features and accommodations can be used by a number of student groups. Students with disabilities who have an IEP or Section 504 Plan may use any of the accessibility features and accommodations that their teams determine are appropriate for them. ELs also may use many of an assessment’s accessibility features and accommodations. In addition, other general education students who do not have disabilities and who are not ELs may use accessibility features to meet their individualized accessibility needs. For students who use accessibility features and accommodations, it is important to have common language to refer to the supports they use for instruction and assessments.

Over the course of their schooling, most students will take tests that are developed or hosted by different vendors because states and assessment consortia collaborate with different vendors over time. Often, one state will collaborate with several vendors depending on its consortium membership or types of assessments. Some students will also take tests developed by different assessment consortia because their families move or because their state changes or drops its affiliation with a specific consortium or test vendor.

There are several ways that consistent terminology for accessibility features and accommodations across states, assessment consortia, and assessment vendors can help students get the support they need. Consistent language can help educators as they select accessibility features and accommodations for students taking different assessments. Consistent language can also allow students to self-advocate effectively. For example, as a state changes vendors, students may know which accessibility features and accommodations worked well for them in the past and be able to identify those accessibility features and accommodations in the new system.

Consistency in the language used for accessibility features and accommodations can also be beneficial for parents. Parents may have varying degrees of familiarity with the array of assessments students take, and so it is important that they understand the role of accessibility features

and accommodations in providing access to instructional content and allowing their children to show what they know and can do on assessments. Consistent language for accessibility features and accommodations across vendor platforms can help parents better understand each accessibility feature and accommodation and play an active role in selecting the appropriate support for their students.

Educators, including teachers and administrators, would no longer have to keep track of the various names used by different vendors for similar accessibility features and accommodations and would no longer have to update student documentation for those names if they all employed consistent terminology. For this group of stakeholders, consistency in language across vendors means more streamlined accessibility policies, professional development, and data collection so that more time can be focused on instruction.

Consistent terminology would benefit state educational staff in situations where the state uses several assessments or switches vendors. With established terminology for accessibility features and accommodations in place, state staff would be able to provide needed technical assistance and training to educators, enabling them to make and implement appropriate accessibility decisions.

Educational policymakers would have an easier time collaborating after establishing consistent language for accessibility features and accommodations. State policymakers in one state may want to talk to policymakers in another state about the use of a certain accessibility feature or accommodation. This would be more feasible if the states used common terminology for accessibility features and accommodations.

Current Accessibility Issues

When students use appropriate accessibility features and accommodations on assessments, they accurately show what they know and can do. The inconsistent language used to describe accessibility features and accommodations is a significant barrier to selecting accessibility features and accommodations that respond to individual students' needs and preferences. The language used to describe accessibility features and accommodations is inconsistent on two levels: first, states, assessment consortia, and assessment vendors use different names for the tiers of support that describe accessibility features and accommodations; second, the states, consortia, and vendors use different names for the accessibility features and accommodations themselves.

One reason for the inconsistent language is the number of agencies developing and implementing assessments. First, some states work with consortia for one or more of their assessments, including the general, alternate, and English language proficiency (ELP) assessments. In these cases, the states adhere to each consortium's accessibility terminology. Still other states develop one

or more of their own assessments, with possibly additional differences in accessibility language. Second, states and assessment consortia contract with different assessment vendors that produce or implement their assessments. With the many states, assessment consortia, and assessment vendors involved in the process of creating and implementing new assessments, it is no surprise that there is variability in the terminology of accessibility features and accommodations.

Although it often appears that these different organizations selected different but similar terms without having a strong preference for one term over another, in other cases the different terminology seems to reflect careful consideration by each organization. In situations where the terminology was originally developed by a vendor, the vendor often finds it difficult to work with states and consortia because there is a constant need to explain what its unique terminology means. In situations where vendors use the terms that were selected by a state or consortium, there is often confusion about how the terminology differs across platforms.

Although the language of accessibility features and accommodations is inconsistent across states, consortia, and vendors, there are some important commonalities. Most of those involved in the assessment development process agree that accessibility features and accommodations should be categorized into different tiers. Most also distinguish between those accessibility features and accommodations that are embedded (provided digitally through instructional or assessment technology) and those that are non-embedded (provided non-digitally at the local level).

Most states, consortia, and vendors use three tiers of accessibility supports. For the purposes of consistency, we refer to them as universal features, designated features, and accommodations. Universal features are those tools that are available for all participating students. Designated features are those tools identified in advance for some students with documented needs determined, in part, with educator input. Accommodations are those tools available for students with IEPs and 504 plans; in some cases, ELs are also eligible for accommodations (see Table 1). There are exceptions to the three-tier approach. WIDA has only two tiers because it omits a middle tier for some students with educator input. ELPA21 and PARCC, meanwhile, consider a fourth tier of administrative considerations for all students, such as time and place of assessment. Nonetheless, common language could be adopted by all states, consortia, and vendors to allow for more coherent understanding of accessibility features and accommodations across assessments.

Table 1. Three-tier Accessibility Support Model

Tiers of Accessibility Supports	
Universal Features (available to all students)	Embedded Universal Features (provided digitally through assessment technology)
	Non-embedded Universal Features (provided at the local level)
Designated Features (available for use by any student for whom the need has been indicated by an educator or team of educators)	Embedded Designated Features (provided digitally through assessment technology)
	Non-embedded Designated Features (provided at the local level)
Accommodations (changes in procedures or materials that ensure equitable access to instructional and assessment content and generate valid assessment results for students who need them; available for students for whom there is a documented need on an IEP or 504 accommodation plan, although some states also offer accommodations for ELs)	Embedded Accommodations (provided digitally through assessment technology)
	Non-embedded Accommodations (provided at the local level)

The system of accessibility features and accommodations for alternate assessments can make assigning consistent names to the tiers of support more difficult. NCSC has a three-tiered model similar to the one previously described. DLM, on the other hand, has three groups of supports for students, all of which are available to all participating students with significant cognitive disabilities. The three groups of supports divide accessibility features and accommodations into those that are embedded features (e.g., color contrast), non-embedded tools (e.g., magnifying glass), and non-embedded services (e.g., ASL translation).

In addition to the complexities created by states, consortia, and vendors having different terminology for the tiers of support, there is the problem of inconsistent terminology for the accessibility features and accommodations themselves. For example, ELPA21, PARCC, and Smarter Balanced provide a support that allows students to mark incorrect answers on multiple-choice questions. In ELPA21’s system, this tool is called “answer choice eliminator”; in PARCC’s system, it is called “eliminate answer choices”; and in the Smarter Balanced system, it is called “strikethrough.”

Further complications arise when states and consortia assign accessibility features and accommodations to different tiers of support. Both PARCC and Smarter Balanced, for instance, allow trained professionals to read certain portions of assessments aloud to students. For PARCC, the “human reader” is an accommodation—that is, a support only for a few students with IEPs and 504 plans. For Smarter Balanced, the “read aloud” is a designated support—in other words, a support for students with documented needs requiring educator input. Configuration and placement of accessibility features and accommodations tend to be unique to each assessment

consortium's and vendor's design and platform. Thus, states, consortia, and vendors need to consider standardizing *both* the names of accessibility features and accommodations *and* the placement of accessibility features and accommodations within assessment platforms.

Current state practices also have implications for identifying and communicating common accessibility language. In a 2014 NCEO survey of states (Shyyan, Lazarus, & Thurlow, 2015) states reported the following most frequent modes of communicating information to districts, schools, and teachers about accessibility features and accommodations: information was made available on a website; a written manual or instructions were sent to each school or district; and a webinar was delivered. State survey findings also indicated that some of the top challenges that states faced in 2014 were training in making decisions related to accessibility features and accommodations and ensuring educators understood the new system. Simplifying and synchronizing the accessibility features and accommodations language would help cope with some of these challenges. Appendix B highlights accessibility features and accommodations that are currently available in states and assessment consortia.

Considerations and Recommendations for Developing Common Accessibility Language

To address the need for developing common accessibility language, considerations and recommendations are provided here for states, consortia, and vendors on the following topics:

- Collaborative efforts
- Instructional and formative assessment implications
- Professional development needs
- Language of requests for proposals
- Needed research

Collaborative efforts. States, assessment consortia, and vendors have demonstrated common approaches to accessibility through previous communication and learning from each other's lessons. Such examples as the multi-tiered approach to accessibility, development of embedded and non-embedded accessibility features and accommodations, and implementation of planning tools (e.g., PNP) have demonstrated commonalities resulting from such collaborative efforts.

Recommendation. States, assessment consortia, and vendors should maximize their collaboration to develop common accessibility language for assessments in general, and common language

for accessibility features and accommodations in particular. This can be achieved through joint forums, cross-organizational publications (white papers, websites, manuals, webinars, etc.), task forces comprised of various stakeholders, and ongoing communication.

Instructional and formative assessment implications. Accessibility supports for assessments are most effective when they are also used in the classroom—both in instruction and other assessments (interim, benchmark, formative, classroom). Consistency in accessibility terminology for both assessments and instruction would be beneficial. Students, along with parents and guardians, can advocate for certain accessibility features and accommodations based on each student’s specific needs and preferences as seen in class. When the terms used for accessibility features and accommodations are consistent, these stakeholders can become more involved.

Recommendation. When developing accessible assessment products, tools, and services using common terminology, stakeholders should also be mindful of transferring this consistency into other environments, such as instruction and other assessments.

Professional development needs. In the context of the accessibility paradigm shift, educators need new, effective, and comprehensive resources to assist them in making optimal individualized decisions for their students. These educators include, but are not limited to, special education teachers, English language development teachers, general education teachers, and assessment administrators and coordinators. All of these groups need up-to-date information on accessibility supports and appropriate decision-making processes. Establishing standard names for accessibility features and accommodations would help educators select accessibility features and accommodations for students more easily and more accurately.

Recommendation. States, assessment consortia, and vendors should use consistent terminology in their professional development resources, so that their content is comprehensible across different platforms and types of assessments. This consistency will also enhance the experiences of educators who face the challenge of having to familiarize themselves with increasing numbers of technology-based classroom solutions.

Language of requests for proposals. States use requests for proposals (RFPs) to delineate requirements for assessment projects to be carried out by vendors. Terminology contained in RFPs is often transferred to product development.

Recommendation. States should use common accessibility language in their proposals when describing needed accessibility features and accommodations and other characteristics of accessible assessments. Moreover, states’ RFPs should contain clauses mandating the use of common accessibility terminology within the delivery engine and testing management sites.

Needed research. The dearth of evidence on appropriate and most commonly used terminology needs to be addressed when common accessibility language is under consideration. What are most frequently used terms and approaches? Are compound terms, such as “strikethrough,” potentially confusing for some students (e.g., ELs and ELs with disabilities)? What placement and sequence of accessibility features and accommodations is most effective within an assessment platform? These and many other questions about accessibility language need to be addressed to make informed decisions about terminology choices.

Recommendation. States, assessment vendors, and consortia should conduct independent and joint research to develop, evaluate, and improve the language used to describe assessment accessibility. Gathering feedback from students and teachers should be part of this research process. Analyses of current research should be carried out to identify accessibility terminology used in the field.

Conclusion

This White Paper addressed the issue of employing common language related to assessment accessibility and accommodations. The issues, considerations, and recommendations discussed in the paper are presented to serve as the platform for the cross-stakeholder collaborative effort toward establishing common terminology used to indicate various accessibility approaches and supports.

References

Christensen, L., Shyyan, V., & Johnstone, C. (2014). Universal design considerations for technology-based, large-scale, next-generation assessments. *Perspectives on Language and Literacy*, 40(1).

Shyyan, V., Lazarus, S. S., & Thurlow, M. L. (2015). *2014 survey of states: Initiatives, trends, and accomplishments*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

Thompson, S., Thurlow, M., & Malouf, D. B. (2004). Creating better tests for everyone through universally designed assessments. *Association of Test Publishers*, 6(1), 1-15.

Thurlow, M., Lazarus, S. S., Albus, D., & Hodgson, J. (2010). Computer-based testing: Practices and considerations (Synthesis Report 78). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

U.S. Department of Education. (2015a). *Dear colleague letter on FAPE*. Washington, DC: Office of Special Education Programs and Rehabilitative Services.

U.S. Department of Education. (2015b). Peer review of state assessment systems non-regulatory guidance for states. Washington, DC: Office of Elementary and Secondary Education.

Appendix A

Accessibility Frameworks of the Assessment Consortia⁵

Assessment	Accessibility Framework		
	For All Participating Student	For Some Students With Educator Input	For Few Students With Documented Needs
General Assessment^b			
PARCC	Features for All Students	Accessibility Features Identified in Advance	Accommodations
Smarter Balanced	Universal Tools	Designated Supports	Accommodations
ELP Assessment^c			
ELPA21	Universal Features	Designated Features	Accommodations
WIDA	Accessibility Tools		Accommodations
Alternate Assessment^d			
DLM	Supports Provided Within DLM via PNP	Supports Requiring Additional Tools/Materials; Supports Provided Outside the DLM System ^e	
NCSC	Optimal Testing Conditions	Accessibility Features	Test Accommodations

^a “All Participating Students” refers to the group of students for whom the test was designed (e.g., ELP Assessment is for ELs; Alternate Assessment is for students with significant cognitive disabilities).

^b General Assessment Consortia: PARCC—Partnership for Assessment of Readiness for College and Careers; Smarter Balanced—Smarter Balanced Assessment Consortium.

^c English Language Proficiency (ELP) Assessment Consortia: ELPA21—English Language Proficiency for the 21st Century; WIDA.

^d Alternate Assessment based on Alternate Achievement Standards Consortia: DLM—Dynamic Learning Maps; NCSC—National Center and State Collaborative.

^e These were placed here because DLM indicates that these supports require prior planning and setup.

Source: NCEO Brief 11: Making Accessibility Decisions for ALL Students. Available at <http://www.cehd.umn.edu/NCEO/OnlinePubs/briefs/brief11/NCEOBrief11.pdf>

⁵Christensen, L., Lazarus, S., Shyyan, V., & Thurlow, M. (2015, July). *Making accessibility decisions for ALL students* (NCEO Brief #11). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. (Authors listed in alphabetic order).

Appendix B

Glossary of Accessibility Features and Accommodations

Note: The accessibility supports (universal features, designated features, and accommodations) included in this glossary may, in some cases, belong to different tiers or be prohibited depending on state/consortium policies and assessment types. In several instances, similar supports (e.g., reading test directions aloud in a student’s native language and clarifying directions in a student’s native language) are grouped for the sake of clarity.

Embedded Universal Features	
Support	Description
Amplification¹ (audio amplification, increase volume, audio aids)	The student raises or lowers the volume control, as needed, using headphones.
Breaks	The number of items per session can be flexibly defined based on the student’s need. Breaks of more than a set time limit 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 feature may result in the student needing additional overall time to complete the assessment.
Calculator	An embedded on-screen digital calculator can be accessed for calculator-allowed items when students click on the calculator button. 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 (notepad)	The student uses this feature as virtual scratch paper to make notes or record responses.
Eliminate answer choices (answer choice eliminator, strikethrough)	The student uses this feature to eliminate those answer choices that do not appear correct to the student.
English dictionary	An English dictionary may be available for the student. The use of this universal feature may result in the student needing additional overall time to complete the assessment.
English glossary (pop-up 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 feature may result in the student needing additional overall time to complete the assessment.

Embedded Universal Features	
Expandable passages	The student is able to expand each passage so that it takes up a larger portion of the screen as the student reads. The student can then retract the passage to its original size.
Global notes	During ELA performance tasks, 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 items in the previous segment.
Highlighter (highlight tool)	The student uses this digital feature for marking desired text, items, or response options with a color.
Keyboard navigation (keyboards shortcuts, two-switch system)	The student is able to navigate throughout test content by using a keyboard, e.g., arrow keys. This feature may differ depending on the testing platform.
Line reader (line reader mask tool, line reader tool, line guide)	The student is able to use this feature as a guide when reading text.
Mark for review (flag for review, bookmark)	The student is able to flag items for future review during the assessment.
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 one or more of these tools would be appropriate.
Spellcheck	Writing tool for checking the spelling of words in student-generated responses. Spellcheck only gives an indication that a word is misspelled; it does not provide the correct spelling.
Writing tools	The student uses writing tools to format and edit written responses, including cut and paste, copy, underline, italicize, bold, and undo/redo.
Zoom (item-level) (magnification, screen magnifier)	The student can enlarge the size of text and graphics on a given screen. This feature allows students to view material in magnified form on an as-needed basis. The student may enlarge test content at least fourfold. The system allows magnifying features to work in conjunction with other accessibility features and accommodations provided.

Non-embedded Universal Features	
Support	Description
Breaks (frequent 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.

Non-embedded Universal Features	
English dictionary	An English dictionary can be provided to the student. The use of this universal feature may result in the student needing additional overall time to complete the assessment.
Noise buffer (headphones, audio aids)	The student uses noise buffers to minimize distraction or filter external noise during testing. Any noise buffer must be compatible with the requirements of the test.
Scratch paper (blank paper)	The student uses scratch paper or an individual erasable whiteboard to make notes or record responses. All scratch paper must be collected and securely destroyed at the end of each test domain to maintain test security. The student receives one sheet (or more as needed) of scratch paper. A marker, pen, or pencil should be provided as well. The student can use an assistive technology device to take notes instead of using scratch paper as long as the device is approved by the state. Test administrators have to ensure that all the notes taken on an assistive technology device are deleted after the test.
Thesaurus	A thesaurus containing synonyms of terms can be provided to the student. The use of this universal tool may result in the student needing additional overall time to complete the assessment.

Embedded Designated Features	
Support	Description
Answer masking	The student is able to block off answer choices.
Color contrast (invert color choice, alternate color themes)	The student is able to adjust the text color and screen background color based on the student's need.
General masking (masking)	The student is able to block off content that is not of immediate need or that may be distracting. Masking allows students to hide and reveal individual answer options, as well as all navigational buttons and menus. The student is able to focus his/her attention on a specific part of a test item by masking.
Text-to-speech (audio support, spoken audio)	The student uses this feature to hear pre-recorded or generated audio of tasks.

Embedded Designated Features	
Turn off universal features (turn off any universal tools)	This feature allows disabling any universal feature that might interfere with student performance, or be distracting to the student.
Zoom (test-level) (increase/decrease size of text and graphics)	The test platform is pre-set to be enlarged for the student before the test begins.

Non-embedded Designated Features	
Support	Description
Bilingual dictionary (word-to-word dictionary [English/native language])	A bilingual/dual language word-to-word dictionary is provided to the student as a language support.
Color contrast	Test content of online items may be printed with different colors.
Color overlay	The student is able to overlay a semitransparent color onto paper-based test content.
Human reader (human read aloud, read aloud)	The student has test content that is provided by an audio file in a computer-based test, read by a qualified human reader.
Magnification device (low-vision aids)	The student adjusts the size of specific areas of the screen (e.g., text, formulas, tables, and graphics) with an assistive technology device. Magnification allows increasing the size to a level not provided for by the zoom universal feature.
Native language translation of directions (translated test directions, general administration directions read aloud and repeated in student's native language)	Translation of general test directions (not item prompts or questions) is a language support available to students prior to starting the actual test. Test directions can be provided either by being read aloud or signed by a test administrator who is fluent in the language. Translations may be provided by a human or the test platform.

Non-embedded Designated Features	
Paper-and-pencil test (paper-based edition)	The student takes a paper-and-pencil version of the test.
Separate setting (alternate location)	Test location is altered so that the student is tested in a setting different from that made available for most students.
Student reads test aloud (student reads assessment to him- or herself)	The student reads the test content aloud. This feature must be administered in a one-on-one test setting.

Embedded Accommodations	
Support	Description
American Sign Language (ASL) (ASL video)	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.
Closed captioning	Printed text that appears on the computer screen as audio materials are presented.
Streamline	This accommodation provides a streamlined interface of the test in an alternate, simplified format in which the items are displayed below the stimuli.
Unlimited replays (repeat item audio)	The student is able to replay items in the listening domain an unlimited number of times.
Unlimited re-recordings	The student is able to rerecord answers in the speaking domain an unlimited number of times.

Non-embedded Accommodations	
Support	Description
Abacus (individualized manipulatives)	This accommodation may be used in place of scratch paper for students who typically use an abacus.
Assistive technology (alternate response options, word processor or similar keyboarding device to respond to test items)	The student is able to use assistive technology, which includes such supports as typing on customized keyboards, assistance with using a mouse, mouth or head stick or other pointing devices, sticky keys, touch screen, and trackball, speech-to-text conversion, or voice recognition.

Non-embedded Accommodations	
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, tactile format (paper, thermoform, or refreshable braille). Both contracted and un-contracted braille (English Braille, American Edition) are available; Unified English Braille will be adopted for future assessments. Nemeth code is available for math.
Braille writer / note-taker	A blind student uses a braille writer or note-taker with the grammar checker, internet, and file-storing functions turned off.
Calculator (calculation device)	A student uses a specific calculation device (e.g., large key, talking, or other adapted calculator) other than the embedded grade-level calculator.
Extended time	Students have until the end of the school day to complete a single test unit.
Human signer (sign language, sign interpretation of test)	A human signer will sign the test directions to the student. The student may also dictate responses by signing.
Large print test booklet (large print version of test, large print edition)	A large print form of the test that is provided to the student with a visual impairment.
Multiplication table	A paper-based single digit (1-9) multiplication table is available to the student.
Print on request (print on demand, paper version of test items)	The student uses paper copies of individual test items.
Scribe (human scribe, scribed response, test administrator entering of responses for student)	The student dictates her/his responses to an experienced educator who records verbatim what the student dictates.
Speech-to-text (student responds orally using external augmentative and/or alternative communication device or software)	The student uses an assistive technology device to dictate responses or give commands during the test.
Word prediction external device	A student with a physical disability that severely limits him/her from writing or keyboarding responses or a disability that severely prevents him/her from recalling, processing, or expressing written language uses an external word prediction device that provides a bank of frequently- or recently-used words onscreen after the student enters the first few letters of a word.

¹The most common name for a support appears in bold while the other names are included in parentheses. However, the bolded name also reflects the authors' judgment on which term would be most accessible for all students.

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