Accessibility Manual for the Dynamic Learning Maps™ Alternate Assessment, 2015-2016

Revision Date: 11/17/2015

All screen shots, data dictionaries, and templates shown or referred to in this manual are accurate on the Revision Date noted above.

When this manual is updated, the Revision Date will also be updated. An alert will be posted on the Test Updates webpage. A summary of changes is included in the Appendix under Document History.

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A special thanks to our state partners who provided helpful feedback and to Pat Almond for her assistance with conceptualizing accessibility in the DLM® system. We are grateful for your time and efforts to improve this document.

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Overview

Audience and Purpose

The Accessibility Manual for the Dynamic Learning Maps™ Alternate Assessment (DLM-AA) provides guidance to state leaders, districts, educators, and Individualized Education Program (IEP) teams on the selection and use of the accessibility features available in the Dynamic Learning Maps (DLM®) system. Informed decision making regarding accessibility is critical to ensure successful and effective participation in the assessment. It is important for educators to understand the full scope of accessibility provided through DLM assessment design, the features available online, and the features allowed offline so that educators can determine the most appropriate access for each student. Decision-making teams can use this manual to assist with the selection, provision, implementation, and evaluation of accessibility features in the DLM-AA. Additional "how-to" information on manipulatives, braille testlets, language translation, and sign language is provided in the TEST ADMINISTRATION MANUAL, available on the DLM website.

What's New in This Version?

Information about these topics has been added or enhanced in this version.

Topic	Page
Complete Access (Personal Needs & Preferences Profile) Updated content and screen shots connected to Spoken Audio and the Other Supports Tab	32

A more comprehensive list of changes to this manual is included in the Appendix under Document History.

Background

DLM is a multiple-state consortium that has developed a new type of computer-delivered alternate assessment. The DLM Alternate Assessment (DLM-AA) is an assessment program designed to validly measure what students with the most significant cognitive disabilities know and can do. DLM provides accessibility by design and is guided by the core belief that all students should have access to challenging, grade-level content, and that educators should adhere to the highest levels of integrity in providing instruction and administering assessments based on this challenging content. The DLM system provides the opportunity for students with the most significant cognitive disabilities to show what they know versus only what they do not know. These are students for whom general education assessments, even with accommodations, are not appropriate. Students taking the DLM-AA require extensive, direct instruction and substantial supports to achieve measurable gains. Students who participate in the DLM-AA, learn academic content aligned to grade-level content standards, but at reduced depth, breadth, and complexity. The DLM content standards, derived from college and career readiness standards, are called the DLM Essential Elements (EE) and are the learning targets for the DLM assessments for grades 3-12 in English language arts (ELA) and mathematics.

In order to determine the accessibility features needed for each student, it is important to understand how the DLM-AA is designed for accessibility from the beginning, and how accessibility features can be customized.

Accessibility by Design

Accessible Content

Accessible content is essential to student success. DLM has created accessible content by developing various complexity levels, multiple and alternate pathways to the nodes, item-writing guidelines based on universal design, and also by using appropriately leveled vocabulary. Universal Design for Learning (UDL) is a scientifically valid framework for guiding education practice that (a) provides flexibility in the ways students respond, demonstrate knowledge and skills, and engage with the content, and (b) reduces barriers in instruction, provides appropriate challenges, accommodations, and supports, and maintains high achievement expectations for all students, including students with the most significant cognitive disabilities and students who have limited English proficiency (Higher Education Opportunity Act, [HEOA, P.L. 110-315, §103(a)(24)]). UDL is a framework that is critical to understanding how students with the most significant cognitive disabilities can achieve success within content standards.

The DLM technology enriches the interaction between the student and the content by delivering a special user interface. The system uses information the educator(s) provides in the Access (Personal Needs & Preferences (PNP)) Profile and the First Contact survey to route the student to a first testlet that provides an appropriate balance of accessibility and challenge. Challenging, grade-level learning targets are embedded within the learning maps. In the instructionally-embedded assessments given throughout the year, the educator is able to review the system's recommendations and then select the appropriate EEs for the student as well as the appropriate complexity level within each EE. Continued student performance in the system refines the system's recommendations. Then in the spring assessment, the student is automatically routed to the most appropriate level of the EEs.

Items in the DLM-AA are grouped together in testlets. A testlet contains three to eight items aligned to one or more EEs. Testlets are designed to allow flexibility in the content complexity level, based on the needs of each student. Items in the DLM-AA are built on research-based learning maps that show the relationships between the knowledge and skills necessary to reach the EEs.

For each EE, the DLM-AA provides testlets at several different levels of complexity, called linkage levels. There are five linkage levels per EE (see Figure 1). Linkage levels are identified by locating the node or nodes in the learning map that most closely match the EE. Nodes specify individual skills and understandings that were identified in the research in mathematics and English language arts. A Target-level testlet is developed based on these nodes. Then, multiple pathways on the map are carefully inspected to identify nodes that link directly to the Target level, preceding and extending beyond it. Linkage levels identify significant milestones en route to the knowledge and skills described by the EE and specify where a student is in relationship to that grade-level target.

The least complex of the linkage levels is called the Initial Precursor. Testlets developed at the Initial Precursor level often reflect foundational nodes in the learning map, which are skills and understandings necessary for learning subsequent academic content (e.g., "focus attention"). Testlets at this level are typically intended for students who do not yet have symbolic communication. Initial Precursor testlets are usually administered by the test administrator, who observes the student's behavior as directed by the system and then records the student's responses in the system.

Between the Initial Precursor and Target are two additional linkage levels: the Distal Precursor and the Proximal Precursor. These linkage levels reflect nodes along the multiple pathways in the learning map that extend down from the Target to the Initial Precursor.

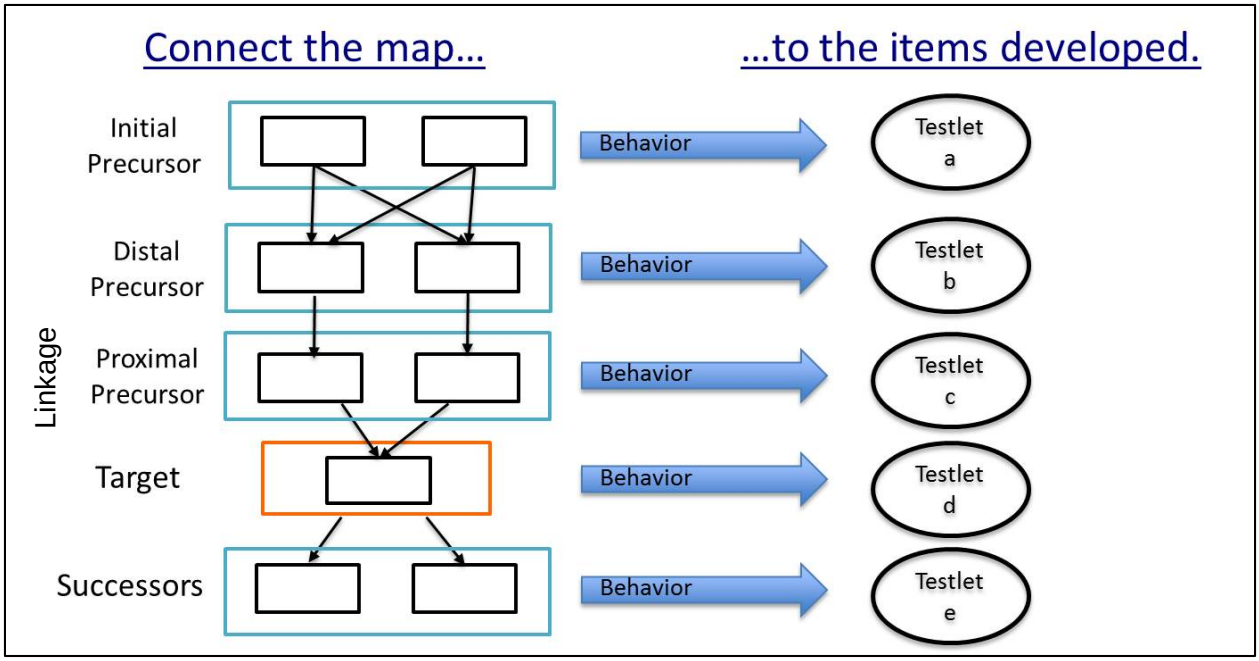


Figure 1. Linkage levels determine testlet development.

Finally, testlets written at the Successor linkage level are designed to give students the opportunity to progress beyond the Target and toward content in the general education grade-level standard. Information gathered from the educator and the IEP team, and ongoing performance by the student determine which level(s) of complexity are most accessible and appropriate for each student.

Accessible Delivery

Testlets are delivered differently in ELA and mathematics based on research of effective instructional practices for students with the most significant cognitive disabilities. Within ELA, reading testlets are designed around texts that are adapted from grade-level themes. The texts' content provides an appropriate level of challenge but is reduced in depth, breadth, and complexity from grade-level texts. The DLM texts are written to support assessment of the specific knowledge and skills described in the nodes.

During a reading testlet, students participate in two readings of a text. The first reading is a shared reading activity that familiarizes students with the entire text and serves as an engagement activity. The second reading includes questions appropriately embedded within the text as well as questions placed at the end of the text when necessary. Embedded questions reduce cognitive load and reliance on long-term memory.

During writing assessments, the test administrator uses the KITE™ system to follow a standardized procedure in which the student selects a topic and writes about the selected topic. A series of screens in the KITE system leads the student and test administrator through various stages of the writing process. There are two types of writing testlets, emergent writing and conventional writing. See the TEST ADMINISTRATION MANUAL for full descriptions. In both types of writing testlets, students use orthography-based tools used for writing in every-day instruction. Students should use standard pens, pencils, keyboards, or other tools that offer access to all 26 letters of the alphabet.

Mathematics testlets start with an engagement activity designed to activate prior knowledge, prepare students for the cognitive process required in the items, and/or provide a context for the questions. The engagement activity does not require a response. Mathematics testlets are built around a common scenario in order to investigate related facets of student understanding of the targeted content.

Testlets are delivered and responses are collected in two general ways.

Most testlets are designed for direct student interaction via computer. This format is based on survey information revealing that students can interact with the computer independently, using special devices, such as alternate keyboards, touch screens, or switches. In some instances, the student may need support from the test administrator to interact with the computer. For example, a technology-enhanced item may require a physical manipulation that is difficult for the student to manage. While most items are multiple choice format, technology-enhanced items are used on a limited basis for items that require certain types of skills, such as sorting or matching. Item types in computer-delivered testlets are shown in Figures 2, 3, 4, 5, and 6.

Item Types

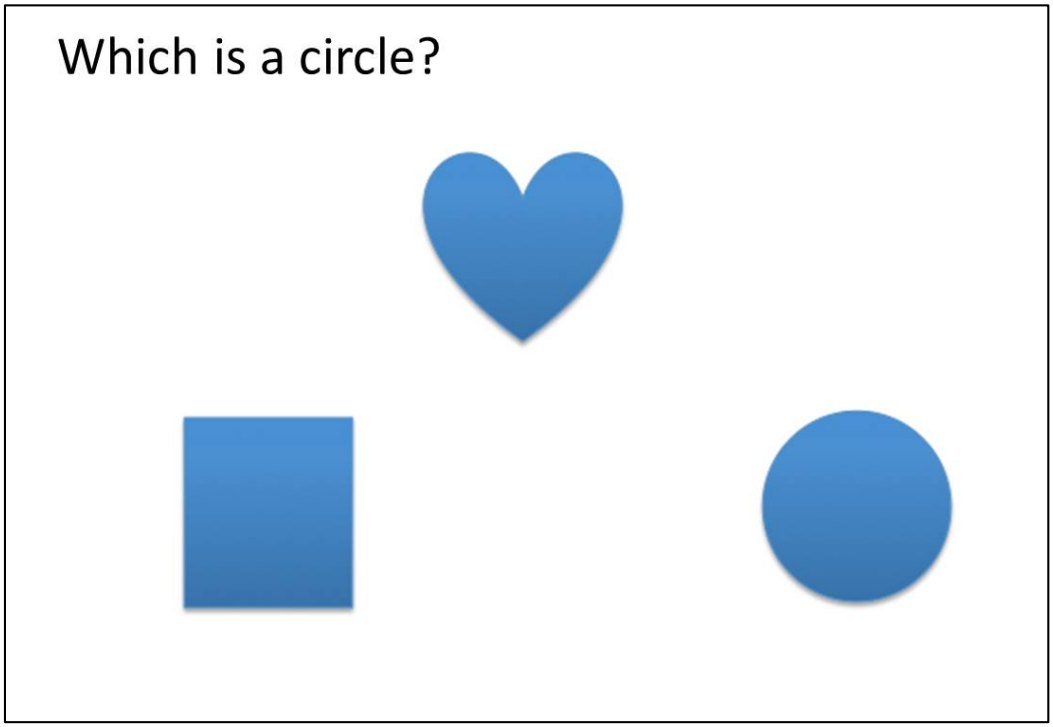


Figure 2. Single-select and multi-select multiple choice, with text or images as answer choices.

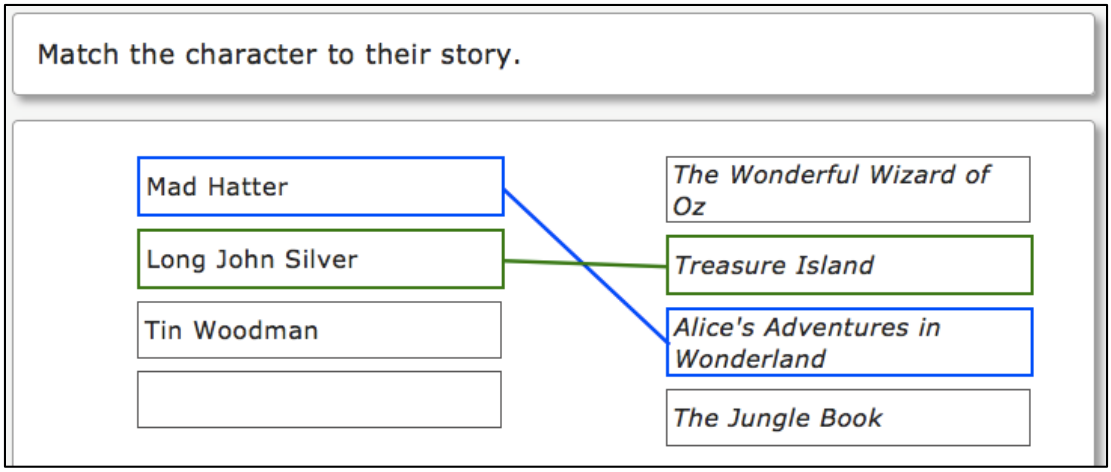


Figure 3. Matching items from two lists.

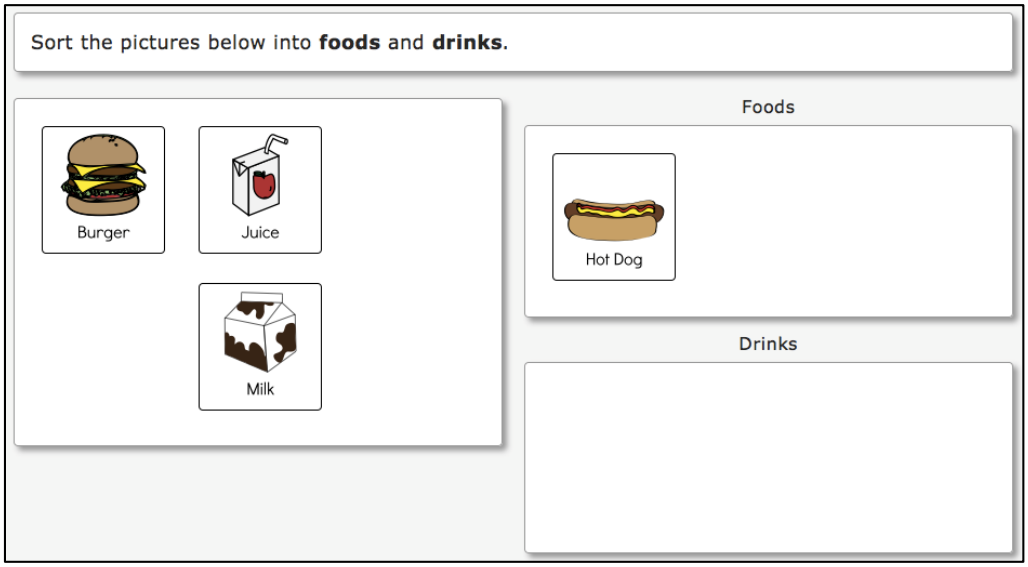


Figure 4. Sorting items into categories by selecting images and placing them in the appropriate box.

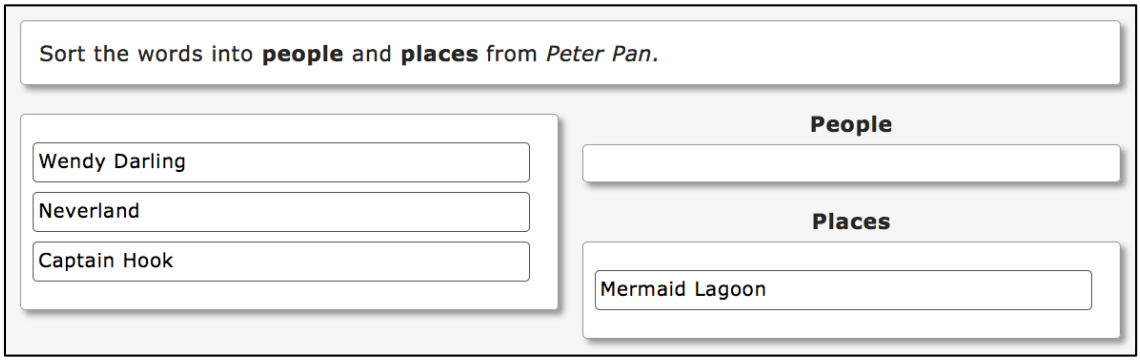


Figure 5. Sorting items into categories by selecting words and placing them in the appropriate box.

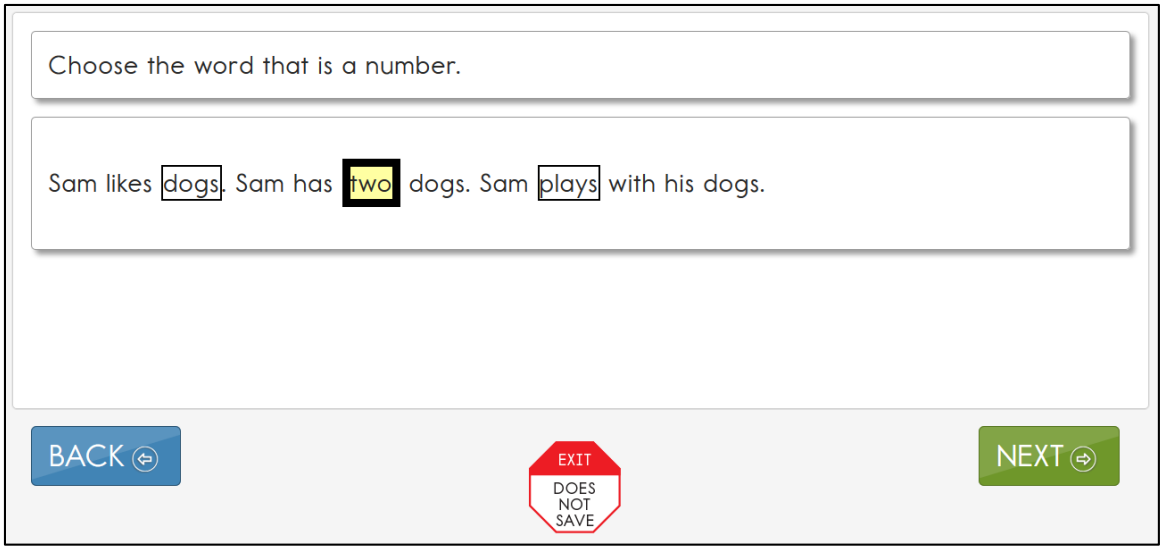


Figure 6. Selecting the appropriate word, phrase, or sentence in a short passage to answer a question.

Some testlets are designed for administration by the educator, outside the system, with step-by-step guidance provided by the system. In these testlets, the test administrator records responses in the system, rather than the student recording his or her own responses. An item from a teacher-administered testlet at the initial precursor linkage level is shown in Figure 7.

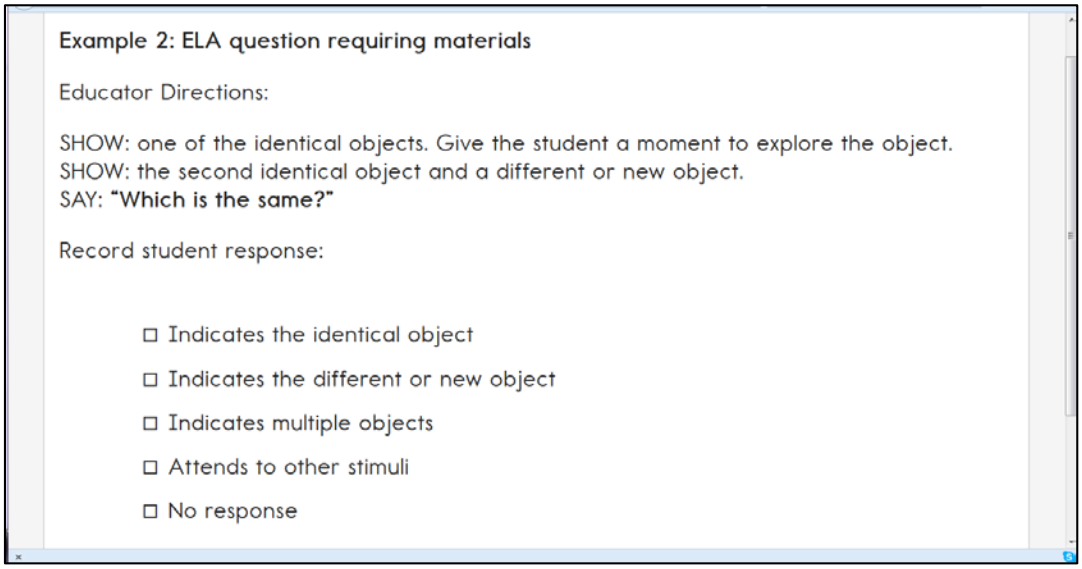


Figure 7. Educator observation question in which the test administrator interacts directly with the student and reports the student's response into the assessment system.

Customization for Each Student

Accessibility to the assessment is provided via the Personal Learning Profile (PLP). The Personal Learning Profile consists of two sources of information: the Access (Personal Needs & Preferences (PNP)) Profile and the First Contact survey (FC). This information tells the system how to customize each student's experience and which test form to deliver from the appropriate linkage level (i.e., level of complexity)

- The PNP profile is used to select the appropriate accessibility features and supports within the system, and thus to tailor each student's experience, based on individual needs. The PNP Profile can be completed any time before testing begins. It can also be changed as a student's needs change. Once the profile is updated, the changes appear the next time the student is logged in to the Kansas Interactive Testing Engine (KITE) system, the platform used to administer the DLM-AA.
- The FC survey is completed prior to assessment administration and is used to determine the initial placement of the student into the assessment—in other words, the best linkage level to deliver. Instructions on how to fill out the FC survey are located in the TEST ADMINISTRATION MANUAL.

The access features in the PNP profile are listed in five tabs: Summary, Display Enhancements, Language & Braille, Audio & Environment Support, and Other Supports. The PNP profile is not unique to DLM; it is used for different testing programs and follows industry standards for computer access. As a result, some features are not relevant to DLM, as shown in the instructions in the following section. Figure 8 shows a screenshot of the summary page, and the accessibility tabs in the PNP Profile.

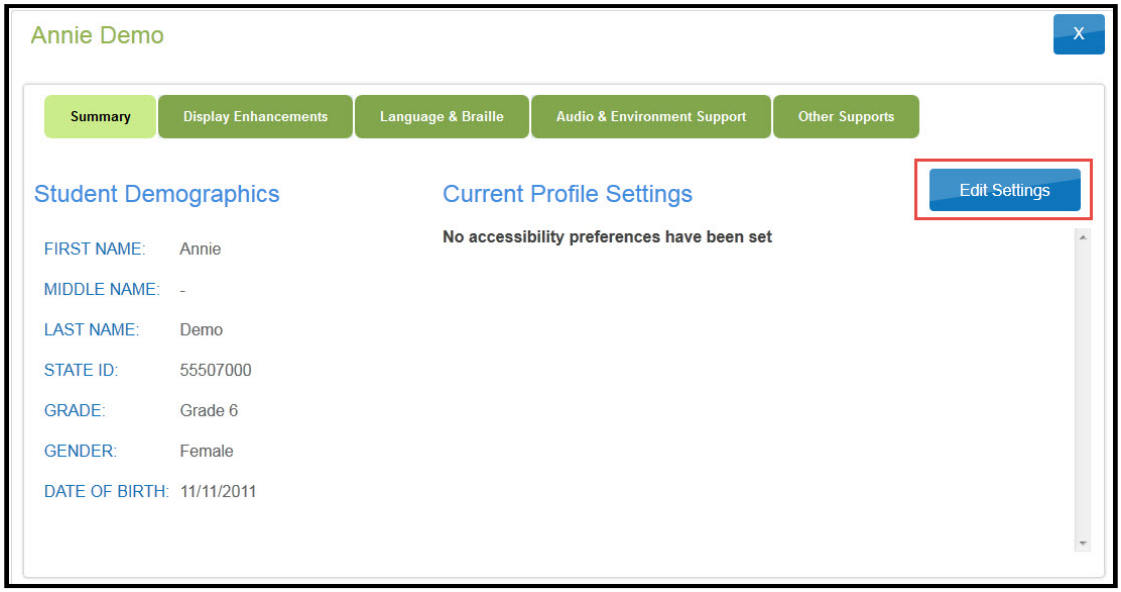


Figure 8. Accessibility features tabs.

Six Steps to Customize DLM Accessibility Features and Supports for Students

This section presents a six-step process for IEP teams, general and special education educators, test administrators, and district-level assessment staff to use in the selection, administration, and evaluation of the accessibility features and supports used in the DLM system by students with the most significant cognitive disabilities.

- Step 1: Include Eligible Students in the DLM Assessment
- Step 2: Learn About the Accessibility Features and Supports: What Does DLM Provide?
- Step 3: Discuss and Select Appropriate Features and Supports: Considerations for IEP Teams
- Step 4: Enter Data into the KITE System
- Step 5: Prepare for the Assessment: Using the Chosen Accessibility Features and Supports
- Step 6: Evaluate the Accessibility Features and Supports Used After the Assessment

These six steps are explained in detail in the following sections. Steps 1 through 3 are intended to assist full IEP teams determine the appropriate accessibility features for eligible students, and Steps 4 through 6 are a guide for the educator or test administrator in entering, using, and evaluating the selected features and supports.

Step 1 – Include Eligible Students in the DLM Assessment

Participation in a State Assessment

With legislation's focus on accountability and the inclusion of all students comes the drive to ensure equal access to grade-level content standards. Students with the most significant cognitive disabilities are included in state and district accountability systems in order to receive the benefits gained from participation, such as improved instruction, higher expectations, and involvement in educational reforms (Thurlow et al., 2002). Several important laws require the participation of students with the most significant cognitive disabilities in standards-based instruction and assessment initiatives. These include federal laws such as No Child Left Behind of 2001 (NCLB) and the Individuals with Disabilities Education Improvement Act of 2004 (IDEA).

Participation Guidelines

Students with the most significant cognitive disabilities have a disability or multiple disabilities that significantly impact intellectual functioning and adaptive behavior. Adaptive behaviors are essential to live independently and to function safely in daily life. In other words, the most significant cognitive disabilities impact students both in and out of the classroom. The DLM-AA is designed for students with these significant instruction and support needs.

DLM provides the following three general participation guidelines.

- *Criterion 1:* The student has a significant cognitive disability. Review of student records indicates a disability or multiple disabilities that significantly impact intellectual functioning and adaptive behavior. Adaptive behavior is defined as behavior that is essential for someone to live independently and to function safely in daily life.
- *Criterion 2:* The student is primarily instructed using the Essential Elements as content standards. Goals and instruction listed in the student's IEP are linked to the enrolled grade-level DLM EEs and address the knowledge and skills that are appropriate and challenging for this student.
- *Criterion 3:* The student requires extensive, direct, and individualized instruction and substantial supports to achieve measurable gains in the grade- and age-appropriate curriculum. The student requires extensive, repeated, and individualized instruction and support that is not of a temporary or transient nature; and the student uses substantially adapted materials and individualized methods of accessing information in alternative ways to acquire, maintain, generalize, demonstrate, and transfer skills across multiple settings.

Individual states may set additional eligibility criteria to establish which students are eligible to take the DLM-AA. IEP teams should refer to their state department of education for further guidance in this area.

Step 2 – Learn About the Accessibility Features and Supports

What Does DLM Provide?

This section identifies the accessibility features and supports available for students taking the DLM-AA. Test administrators and students may try out these features in available practice tests to determine what works best for each student. These options are designed to deliver a personalized, accessible user experience within the KITE system.

The DLM-AA distinguishes between accessibility features and supports that: (1) can be utilized by selecting online features via the PNP Profile, (2) require additional tools or materials, and (3) are provided by the test administrator outside the system. Table 1 shows which features fall under each of these categories. Each feature and support is described in the following section. If your state requires documentation about certain accessibility features in the student's IEP, refer to the State Appendix (if provided) for more information, or contact your state department of education.

Prior to administering the DLM-AA, educators provide information about the accessibility needs for each assessed student. The KITE system stores this information and uses some of it to activate certain features.

Table 1
Accessibility Features and Supports of the DLM Assessment System

Accessibility Feature	Support Provided Within KITE via the PNP Profile	Support Requires Additional Tools/Materials	Support Provided by the Test Administrator Outside the System
Category 1			
Magnification	X		
Invert Color Choice	X		
Color Contrast	X		
Overlay Color	X		
Spoken Audio • **Text Only** • **Text & Graphics** • **Nonvisual**	 X X X		
Category 2			
Uncontracted Braille		X	
Single-Switch System		X	
Two-Switch System		X	
Individualized Manipulatives		X	
Calculator		See TIP	

Accessibility Feature	Support Provided Within KITE via the PNP Profile	Support Requires Additional Tools/Materials	Support Provided by the Test Administrator Outside the System
Alternate Form – Visual Impairment		X	
Category 3			
Human Read Aloud			X
Sign Interpretation of Text			X
Language Translation of Text			X
Test-Administrator Entering of Responses for Student			X
Partner-Assisted Scanning (PAS)			X

Support Categories

Category 1: Support provided within KITE via the PNP Profile

Online supports include magnification, invert color choice, color contrast, and overlay color. Directions detailing how to select the supports provided by the PNP Profile are found in Step 4 – Enter Data into the KITE System.

Educators are advised to test the following color options in advance to make sure they are compatible and provide the best access for students.

- *Magnification* – Allows educators to choose the amount of screen magnification during testing. Educators can choose between a magnification of 2x, 3x, 4x, or 5x. Without magnification, the font is Report School, size 22. Scrolling may be required when the level of magnification is increased because the entire item will no longer be visible on the screen. This will vary based on the level of magnification, the amount of content in the item, and the size of the screen.
- *Invert Color Choice* – Makes the background color black and the font white. Images display with a white background in both ELA and mathematics.
- *Color Contrast* – Allows educators to choose from color schemes for the background and font.
- *Overlay Color* – The background color of the test. The default color is white. Educators may select from the alternate colors of blue, green, pink, gray, and yellow.
- *Spoken Audio* – Synthetic spoken audio (read aloud with highlighting) is read from left to right and top to bottom. There are three preferences for spoken audio: text only, text and graphics, and nonvisual (this preference also describes page layout for students who are blind).

Category 2: Supports requiring additional tools or materials

These supports include braille, switch system preferences, iPad administration, and use of special equipment and materials. These supports typically require prior planning and setup. These supports are all recorded in the PNP Profile.

- *Uncontracted Braille* – All braille forms use uncontracted braille. Contact your Assessment Coordinator to learn if braille forms are delivered at the state or district level and in BRF or embossed files. See the Test Administration Manual for information about alternate forms, including Braille.
- *Single-Switch System* – Activated using a switch and switch interface that emulates the Enter key on the keyboard. In the PNP Profile, educators can set scan speed, indicate if scanning should begin automatically when the page appears, and select the number of times the scan cycle repeats before stopping.
- *Two-Switch System* – Does not require activation in the PNP Profile. Two switches and a switch interface are used to emulate the Tab key to move between choices, and the Enter key to select the choice when highlighted.
- *Individualized Manipulatives* – Educators may use manipulatives that are familiar to students, (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters, etc.). Please refer to the TIPs for more information.
- *Calculator* – Permitted on math testlets unless it interferes with the construct of the testlet. The Testlet Information Page (TIP) for each math testlet will specify whether or not a calculator is permitted.
- *Alternate Form - Visual Impairment* – When a student does not read braille but is blind or has a visual impairment that prevents the student from interacting with the on-screen content, the educator should choose "alternate form – visual impairment." This option is used for some specific Essential Elements and linkages levels. Alternate forms are not provided at every single Essential Element and linkage level.

Category 3: Support provided by the test administrator outside the system

Supports offered outside the KITE system require actions by the test administrator, such as reading the test, signing or translating, or assisting the student with entering responses. These supports are recorded in the PNP Profile even though they are delivered by the test administrator outside of the system.

- *Human Read Aloud* – Test administrators may read the assessment aloud to students. See the TEST ADMINISTRATION MANUAL for additional information.
- *Sign Interpretation of Text* – Test administrators may sign the content to students using American Sign Language (ASL), Exact English, or personalized sign systems.
- *Language Translation of Text* – Test administrators may translate the text for students who are English language learners or respond best to a language other than English.
- *Test-Administrator Entering of Responses for Student* – If students are unable to physically input their answer choices, they may indicate their responses through their typical response mode and/or forms of communication (e.g., eye gaze, partner-assisted scanning). Test administrators may key in those responses. This option should only be used when students are unable to independently and accurately record their responses in the system.

- *Partner-Assisted Scanning (PAS)* – A strategy in which test administrators assist students with scanning, or going through, students' answer choices. Test administrators read and/or point to each answer choice and the students indicate when their desired choice is presented.

Timing and setting options are not defined in the DLM system because testing is not timed and is administered individually. Students may take as much time as needed and work in settings that are most appropriate for them. In other words, any flexibility in location and testing time that the student needs is permissible. For example, the student may take as many breaks as needed throughout the assessment. **The system can sit inactive for up to 28 minutes before automatically logging out.** If additional time is needed, the student will need to be logged back into the system. Any items that have been completed will not be saved. See Frequency of Testlet Delivery in the TEST ADMINISTRATION MANUAL for more information.

Supports Not Available in KITE

IEP teams may be accustomed to seeing more supports than are provided in DLM, especially when they consider accommodations that students with the most significant cognitive disabilities may need for general education assessments. Because all students participating in DLM have significant cognitive disabilities, many of the typical accommodations are not appropriate for DLM. For example:

- Sign language using human or avatar videos on screen is not provided in DLM. The majority of students who are eligible for the DLM Alternate Assessment and communicate with sign language use Exact English or personalized sign systems.
- Tactile graphics are not provided in DLM. Instead, DLM incorporates the use of objects for concrete representation and encourages educators to use individualized tactile representations with their students as appropriate. See the TIPs for more information.

Decisions about which supports to include in the DLM Alternate Assessment were made using results from more than 50,000 First Contact survey responses, feedback from national sensory impairment experts who also have expertise in this population of students, and lessons learned from test-administration observation studies.

Step 3 – Discuss and Select Appropriate Accessibility Features and Supports: Considerations for IEP Teams

When possible, educators should choose supports that are consistent with the student's current needs as documented in the IEP. However, a perfect correlation does not always exist between accommodations usually identified for paper-based tests and PNP features and tools available in the DLM computer-based environment. The PNP Profile goes beyond traditional accommodations and includes supports and tools that students may prefer in addition to those they require. There are some tools that any student should be able to use, such as font color, in addition to the accommodations documented on an IEP. However, students need to gain familiarity with these tools in their routine, computer-based instruction. Educators should be cautious about selecting too many tools and should especially avoid features the student is unfamiliar. Using too many tools or unfamiliar tools could be distracting or detrimental.

Who Decides What Accessibility Features and Supports Are Needed?

Accessibility features should be chosen on the basis of the individual student's needs, not on the basis of the disability category, grade level, or instructional setting. Once selected, accessibility supports should be used consistently for instruction (as much as possible) and assessment. Due to the nature of computerized assessments versus non-computerized instruction, some supports may not be usable during instruction. To help students gain experience with the specific supports selected for them, educators should work with students to complete practice activities and take released assessments online. Students can use the practice activities as often as needed. Each educator, and anyone responsible for the implementation of the accessibility supports, must be informed of the specific supports that have been selected for each student and should participate in the evaluation of the supports.

Guiding Questions for Discussion and Selection of Appropriate Accessibility Features and Supports

(Thompson et. al., 2005)

Some questions teams may ask in the process of determining appropriate supports include:

1. What are the student's learning strengths and in what areas does the student need further improvement?
2. How do the student's learning needs impact his or her achievement of the EEs?
3. What instructional and assessment tasks are difficult for the student to do independently when working one-on-one in the classroom, and/or when interacting in an online environment?
4. What current supports help the student with these difficulties, both one-on-one with an educator, and in the online environment?
5. What kinds of instructional strategies (e.g., visual, tactile, auditory, combination) work best for the student? What accessibility supports match these strategies and could help the student access the assessment?
6. What accessibility supports are regularly used by the student during instruction and assessments in the classroom?
7. Which supports and tools does the student prefer?
8. What were the results for assignments and classroom assessments when accessibility supports were used and not used?
9. Has the student had any difficulties interacting with these supports in the past? If so, what are the difficulties and how can they be resolved?

10. What accessibility supports will increase the student's access to the assessment by addressing the student's learning needs and reducing the effect of the student's disability?
11. What effective combinations of accessibility supports would help this student?

Educators should choose supports that are consistent with the student's current needs and preferences as documented in the IEP. Furthermore, these supports should be used during instruction whenever possible. Educators may also need to amend students' IEPs to include any additional, appropriate supports available in the KITE system that are not listed on the IEP. Specific state policies may be found in the State Appendix at the end of this manual.

The user interface in KITE has been specially designed for students with the most significant cognitive disabilities. However, students may need various levels of support during the assessment in order to interact with the computer. Testlets delivered directly to students via computer are designed with the assumption that students can interact with the computer independently, using special devices such as alternate keyboards, touch screens, or switches as necessary. Educators may also help students navigate across screens or enter responses that students select during the test. The following section describes additional allowable supports.

Flexibility in Support Use

Effective use of the PNP options allows most students appropriate access to the assessment, making the DLM-AA a meaningful indicator of students' knowledge and understanding of the Essential Elements. However, educators may need to provide additional supports for a limited number of students to make the testlets accessible.

When additional supports to the assessment process are needed, educators should follow two general principles:

1. The student is expected to respond independently.
2. Supports should be familiar to the student because they have been used during routine instruction.

The following table describes some common allowable supports for students taking testlets delivered via computer. Further guidance on the delivery of these supports is provided in the TEST ADMINISTRATION MANUAL.

Table 2
Common Allowable Supports

Accessibility Issue	Allowable Support
The student has limited experience with, motor skills for, and/or devices for interacting directly with the computer.	The test administrator may navigate the screens. The student may indicate answer choices to the educator and the educator may enter the responses on behalf of the student. The test administrator may only repeat the question as written until the student makes a choice.
The student has blindness and typically reads braille.	Braille forms of the assessments are available for students who use braille. In addition, the test administrator may read aloud (using human read aloud) for students whose braille skills are not strong enough to allow them to demonstrate what they know and understand about the Essential Elements. The test administrator may use familiar objects or create tactile graphics in place of graphics that appear on screen. See instructions in the TEST ADMINISTRATION MANUAL on how to access testlets in braille form.
The student has a severe visual impairment and needs larger presentation of content than the 5x magnification setting provides.	The test administrator may use an interactive whiteboard, projector, or any magnification device that works with the computer screen. For familiar texts in ELA assessments, the test administrator may retrieve the texts from the DLM bookshelf in the Tar Heel Reader library and print the texts in the size and contrast the student needs or read the text to the student.
The student uses sign language to communicate and has limited proficiency in reading text.	The test administrator may sign the text, spelling unfamiliar words and adapting or interpreting the language as needed based on the signs with which the student is familiar.
The student uses low-tech (i.e., not computerized) eye gaze to communicate.	The test administrator may represent the answer options in an alternate format or layout off the computer and enter the student's selected responses.
The student uses eye gaze or another means to indicate yes/no responses.	The test administrator may present the question and options as described: First read the question and go over the response options (in the same order as presented on screen). Then repeat the question and present response option 1, yes/no; response option 2, yes/no; and response option 3, yes/no.
The student uses one or two switches to access the computer but is not 100% consistent or accurate in their use.	The test administrator may use partner-assisted scanning to point to and/or read each answer option. The student should indicate when the desired answer option is presented. The test administrator may also navigate from screen to screen and allow the student to use scanning to select the desired answer on each item screen.
The student has blindness and does not communicate verbally.	The test administrator may use human read aloud to read the testlet to the student. The test administrator may also use objects and personalized tactile graphics to represent graphics that appear on the computer screen. See the TEST ADMINISTRATION MANUAL for the human read aloud guidelines.
The student needs special equipment for positioning of materials (e.g., slant board) or non-computerized materials (e.g., Velcro objects on a board) to respond to questions.	The test administrator may use the equipment and materials with which the student is familiar. The student should still interact with the content on the screen, but the educator may navigate and enter answers that the student has demonstrated outside the system.
The student requires special technologies to complete the writing assessment.	Students may use whatever writing technologies or supports they use in everyday instruction to complete writing testlets in DLM as long as the supports involve the use of the alphabet to produce letters and words. Students may not use word banks, picture banks, or symbol/icon-based communication systems for the portion of the assessment that requires writing with the alphabet.

Table 3
Allowable and Unallowable Supports

Allowable Supports	Unallowable Supports
• Sign interpretation of text • Human read aloud • Individualized student-response mode • Assistance with navigation across screens • Entering responses selected by students • Special equipment for positioning • Interactive whiteboard or projection devices • Representation of the answer choices in an alternate format • Word prediction • Talking word processors and screen readers	• Repeating the question after the student has selected a response. This is considered prompting, in order to influence the student to choose a different answer. • Using prompts or hand-over-hand guidance • Reducing the number of answer options or giving content hints • Using symbols or pictures to represent answer options that appear as text in the testlet • Modifying the content of a performance task in a computer-administered testlet in an attempt to help the student arrive at the correct response • Using word or picture banks during writing testlets • Taking dictation of whole words or sentences from the student in writing testlets • Changing tone, inflection, or body language to cue the correct response when reading testlets to student

Students who take DLM assessments should be able to indicate their response through whatever means they can. Sometimes test administrators need to think creatively about how to support students with different means of expressive communication. Below are some examples based on real students.

Table 4
Students with Individualized Student-Response Modes

Examples	Support
Example #1: The student, who uses eye gaze, receives a computer-delivered testlet. The educator puts the answers on flashcards and spaces them further apart than the computer provides so the educator can accurately capture the student response.	It is acceptable for the onscreen answer options to be written as-is on cards to place on an eye-gaze display as described. It is important that the responses match those provided on the screen. However, partner-assisted scanning may be more successful for some students.
Example #2: The student is blind and her only current mode of communication is a single switch. The student receives testlets with pictures/manipulatives. The TIP does not provide alternate text to describe the pictures or guidance on how the educator can deliver this assessment. The student has not learned braille so that feature was not chosen on the PNP Profile. The educator didn't preview the testlet. When the educator administers the first item, she does not know what to do.	When a student does not read braille but is blind or has a visual impairment that prevents the student from interacting with the on-screen content, the educator should choose "alternate form – visual impairment" on the Access (Personal Needs & Preferences) Profile in Educator Portal. The educator may also wish to mark "human read aloud" on the PNP Profile and then read the content and alternate text (if available). If N/A is indicated on the TIPs page, there is no alternate text available. Alternate text is not provided when it cues the correct answer.
Example #3: The student usually accesses text with pictures. The educator provides supplemental pictures as necessary, specifically for the answer options, so the student can access the text.	It is not acceptable to provide pictures to support text in the DLM assessment. The focus of most Essential Elements is on the ability to make meaning from words. The educator can read the text aloud to the student (mark human read aloud in the Access (Personal Needs & Preferences) Profile, but it is not acceptable to use picture symbols to support word reading. It is also not acceptable to substitute pictures for words or pair pictures with words that appear as answer options. Many ELA answer options include adjectives or verbs that are not easily standardized to an alternate communication symbol system.
Example #4: The student has a physical disability that results in limited mobility. The testlet requires the student to manipulate materials.	A student with limited mobility may use their current mode of communication to indicate direction to the test administrator to select answers and/or manipulate materials on behalf of the student.
Example #5: The student needs special equipment for positioning (e.g., slant board) or non-computerized materials (e.g., Velcro objects on a board) to respond to questions.	The test administrator may use the equipment and materials with which the student is familiar. The student should still interact with the content on the screen, but the educator may navigate and enter answers the student has demonstrated outside the system.
Example #6: The student uses graphic organizers, manipulatives, or other tools to complete academic work.	The test administrator may use the equipment and materials with which the student is familiar. The student should still interact with the content on the screen, but the educator may navigate and enter answers the student has demonstrated outside the system. See the Testlet Information Page (TIP) for each testlet to see approved or not approved specific manipulatives.

Educators should use the general principles above and specific examples of allowable and unallowable supports when planning test sessions for a student who needs additional supports. More information about delivering these supports is provided in the TEST ADMINISTRATION MANUAL. For questions regarding whether a support is allowable, educators may contact the Service Desk at 1-855-277-9751. If supports are provided that are not listed in this guide, educators may be asked to describe these supports, as determined by state policy. More information about supports may be provided by your state. Consult the State Appendix for more information.

Step 4 – Enter Data into the KITE System

To activate selected accessibility features, the educator fills out the Access (PNP) Profile in Educator Portal. If a student is missing from the roster in Educator Portal, the educator should contact the Data Steward for further assistance.

Enter Data in the PNP Profile

The Personal Needs & Preferences options are used for different testing programs and follow industry standards for access. As a result, some features are not relevant to DLM and selecting them will have no effect on the student's test. For example, the PNP Profile allows the educator to indicate that a student needs additional testing time, but because DLM tests are not timed, choosing this option has no effect on the student's test.

Educators should set PNP options before beginning the test administration; however, test administrators may change options if needed after the assessment has begun. If test administrators decide to adjust the PNP-driven accessibility features during the assessment, they can select EXIT DOES NOT SAVE**,** log out of KITE, change the PNP features in Educator Portal, and log back into KITE. The newly selected features should be active when the test administrator logs back in. More information about KITE and Educator Portal is provided in the TEST ADMINISTRATION MANUAL.

For a step-by-step procedure, see Enter Data in Access (Personal Needs & Preferences) Profile.

Demonstration of PNP Features: What Students Will See

This section provides more information, including screenshots, about some of the PNP accessibility features described in Step 2 of the customization process. The features described in this section include magnification, overlay color, invert color choice, color contrast, switch use, and Spoken Audio. In addition, educators are able to explore and manipulate the features online through practice testlets and to practice using the features with students. Providing ample time for each student to use the features in the practice testlets enables educators to determine which settings work best for each student.

Magnification

The whole screen is zoomed in when magnification is chosen. The magnification options are 2x, 3x, 4x, and 5x. Test administrators should expect to have to scroll to the right and/or down to find the NEXT button when magnification is selected. Test administrators must keep in mind that this scrolling may have a negative impact on the student's ability to access the assessment.

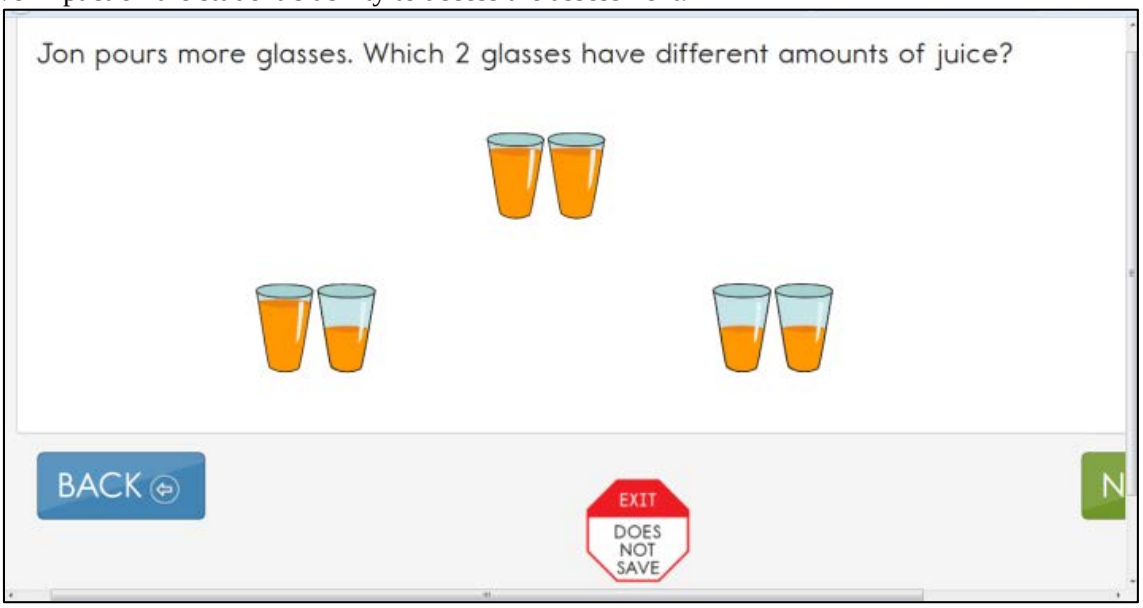


Figure 9. 2x Magnification

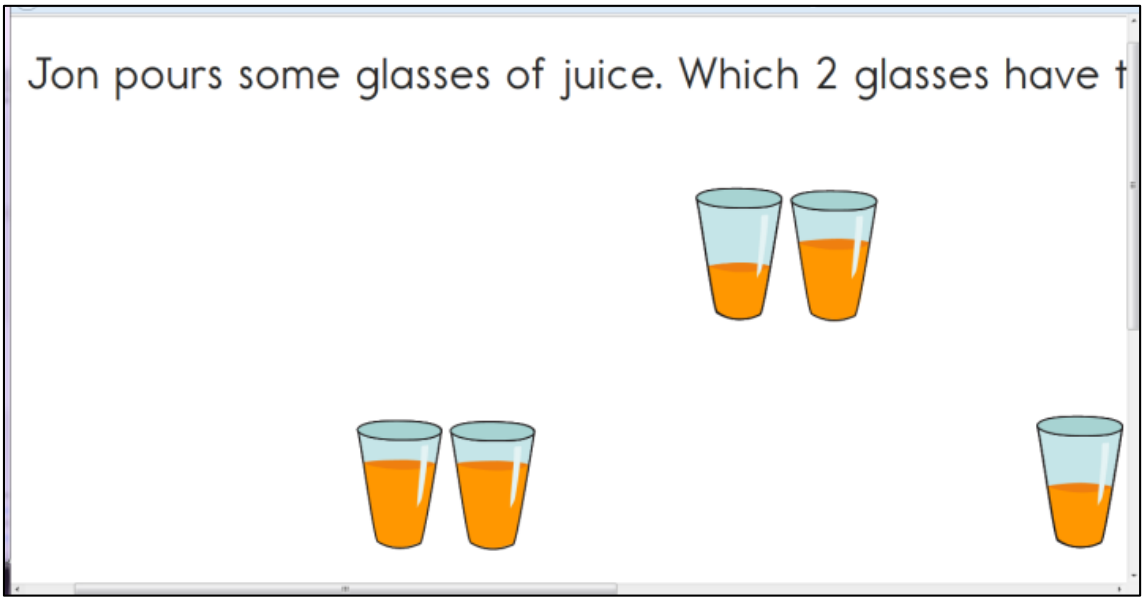


Figure 10. 5x Magnification. (Users must scroll more because the size of the content exceeds the viewing area.)

Overlay Color

The background overlay color options are: blue, green, pink, gray, and yellow. The default is white. The font remains black.

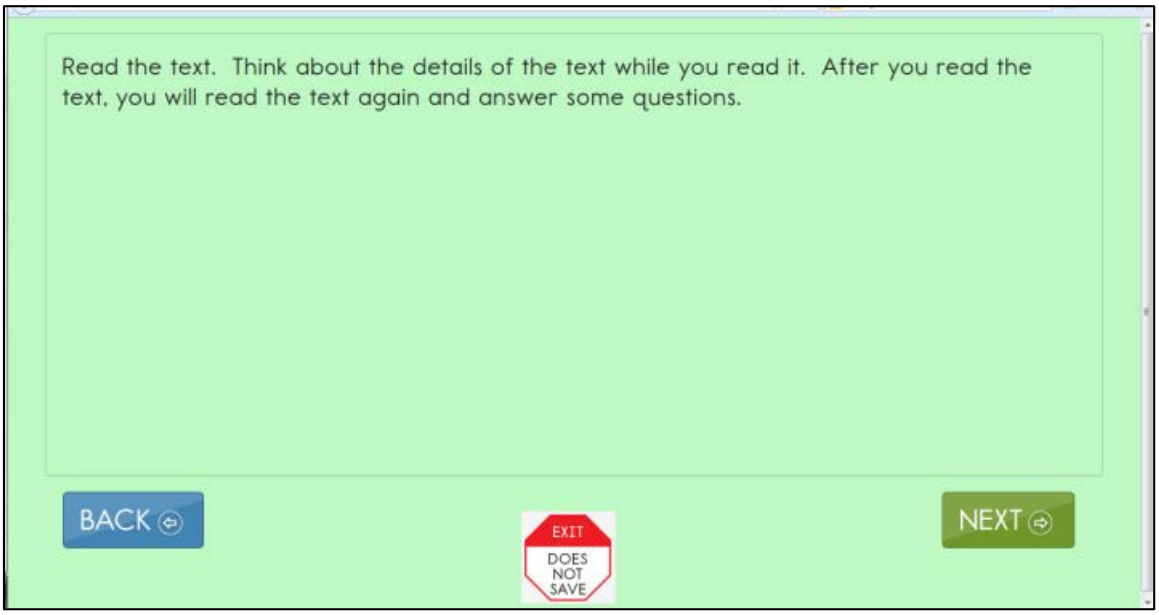


Figure 11. Overlay color in green.

Invert Color Choice

The standard presentation in DLM is a white background with black font. When Invert Color Choice is selected, the background is black and the font is white.

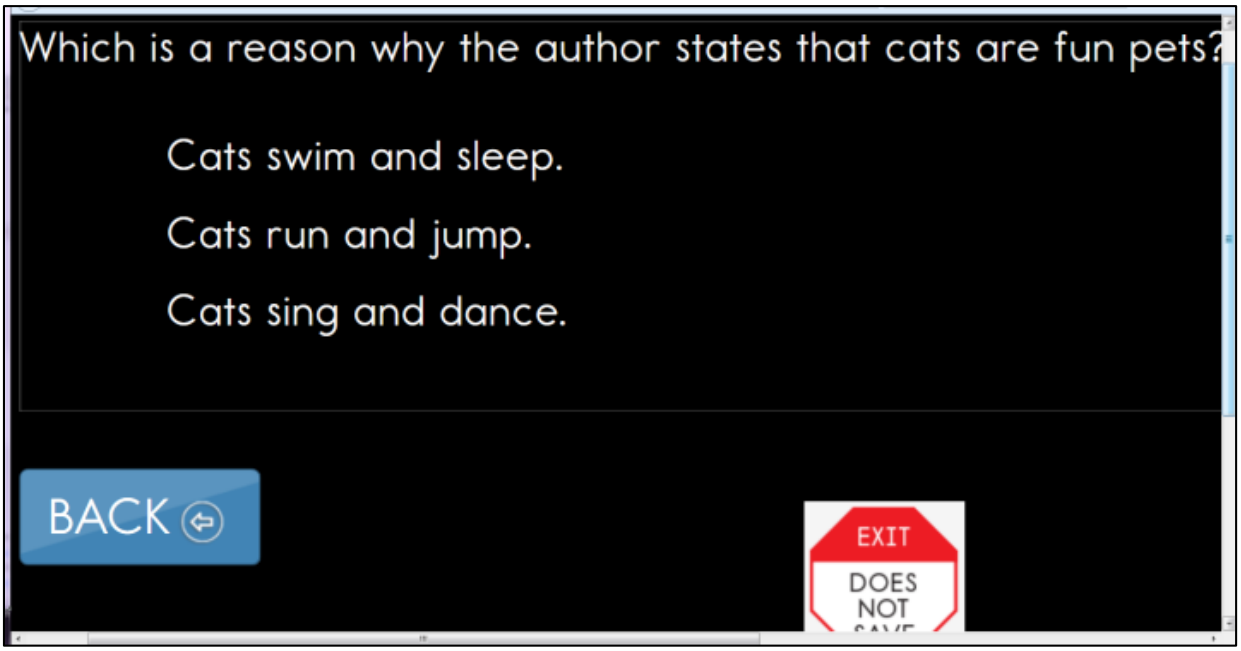


Figure 12. Invert color choice and 4x magnification.

Color Contrast

Color contrast allows the educator to change both the background and the font color. The background and font color options are: white background with green font, white background with red font, black background with gray font, or black background with yellow font.

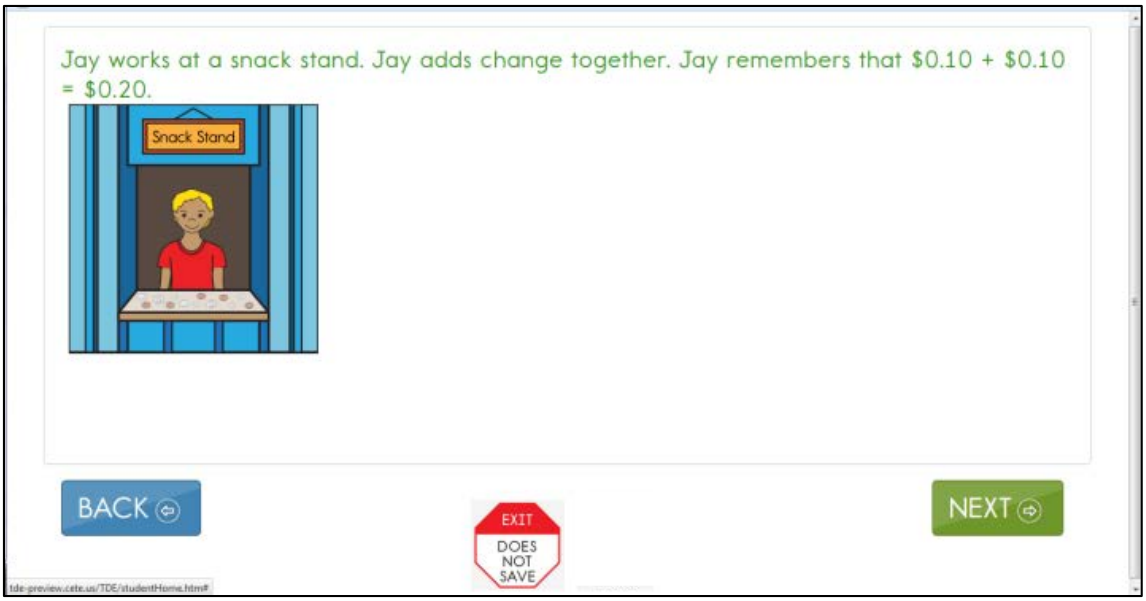


Figure 13. Color contrast with a white background and green font.

Switch Use

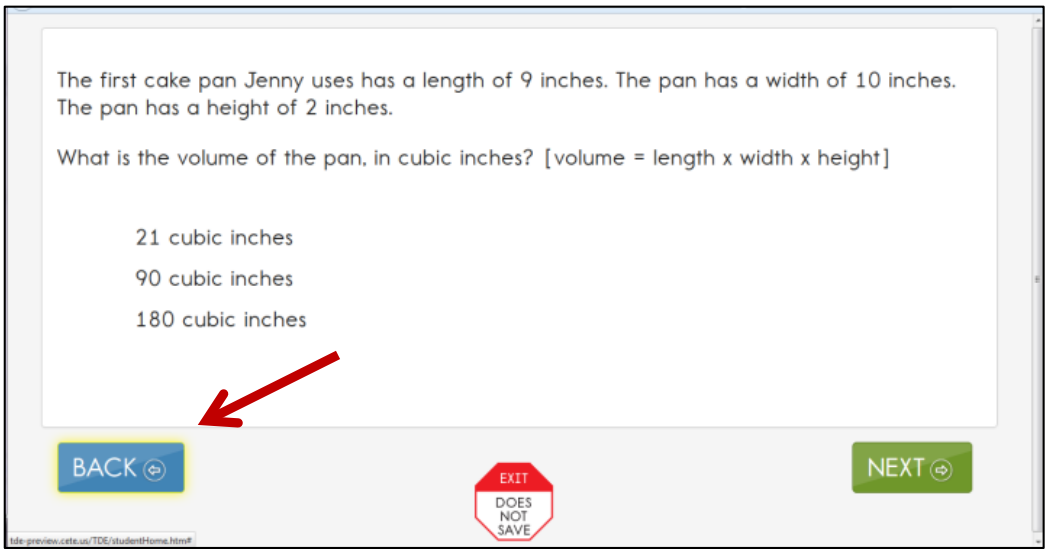
The following table summarizes the actions that occur when switches are used for switch-accessible items in DLM. The table explains the actions separately for students using a single-switch system and a two-switch system. In both cases, if switch access is selected, a switch interface is required for the student to use switches to interact with the system.

Table 5
Switch Use by Item Type

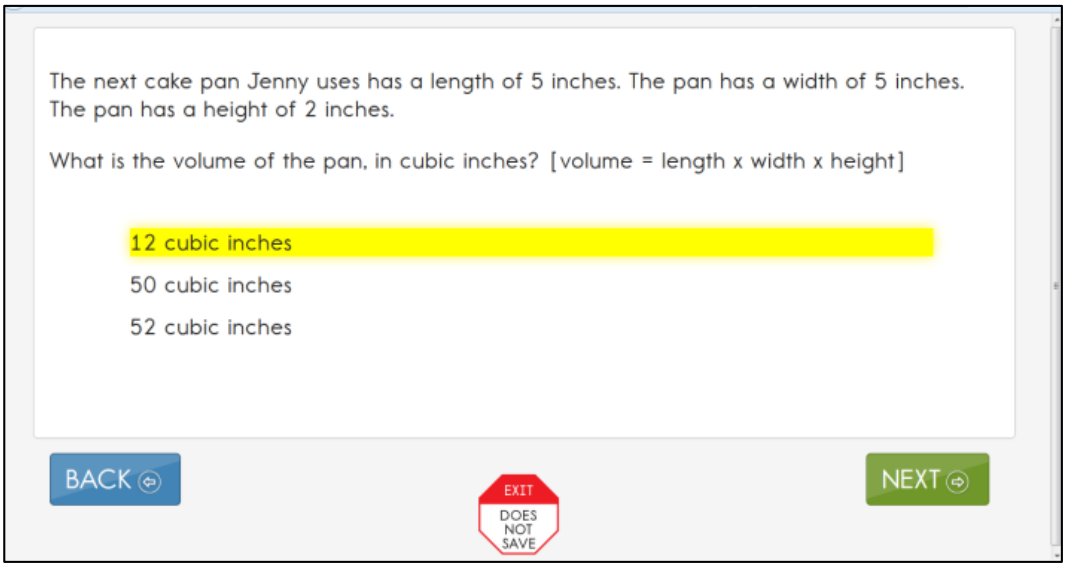
Item Type	Single-Switch System	Two-Switch System
Multiple Choice ■ Text or pictures as answer choices	The system will scan through each answer choice and navigation button on the page. The PNP Profile indicates scanning speed, the number of cycles without selection before scanning is stopped, and whether or not switch activation is required to initiate the scanning cycle on a page.	1. The student uses the switch set to emulate Tab to move from one item to the next. The system highlights each answer choice and navigation button as the Tab switch is activated. 2. The student uses the switch set to emulate Enter to select an option when it is highlighted to indicate the desired answer.
Sorting ■ The student takes items from the left side of the screen and moves them into groups on the right	The system will scan through each drop zone and navigation button based on switch settings selected in the PNP Profile. When a drop zone is selected, the system scans items from top to bottom within the drop zone until an item is selected or the scan cycle has repeated three times without a selection.	1. The student uses the switch set to emulate Tab to move from one drop zone to the next. 2. The student selects a drop zone when it is highlighted using the switch set to emulate Enter. 3. Once a drop zone is selected, the student uses the switch set to emulate Tab to move through items in the drop zone from top to bottom. 4. The student uses the switch set to emulate Enter to select an individual item when it is highlighted. 5. The item remains highlighted as the student resumes use of the Tab and Enter switches to select the target drop zone.
Matching ■ The student identifies items in two lists that match	The system will scan through the group of items on the left, the group on the right, and the navigation buttons based on switch settings selected in the PNP Profile. The student uses the switch to first select a set of items. Then the items within the set are scanned from top to bottom. The student uses the switch the select the individual item. The item remains highlighted as the student repeats the scan cycle to select the matching item from the set on the other side.	1. The student uses the switch set to emulate Tab to move from the set of items on the left, to the set on the right, then to the navigation buttons. 2. The student uses the switch set to emulate Enter to select a list when it is highlighted. 3. Once a list is selected, the student uses the switch set to emulate Tab to move through items in the list from top to bottom. 4. The student uses the switch set to emulate Enter to select an individual item when it is highlighted. 5. The item remains highlighted as the student resumes use of the Tab and Enter switches to select the matching item on the other side.

Item Type	Single-Switch System	Two-Switch System
Notes	When manual override is selected, scanning stops when an item/object is selected. The student reinitiates scanning by hitting the switch. When scanning is reinitiated, the system restarts from the beginning of the cycle.	After selecting an item/object, selecting Tab restarts the cycle over from the beginning.

When the switch is activated, it will highlight each option for the student. The BACK button is highlighted in the following screenshot.



As shown in the following screen shot, the answer options also highlight.

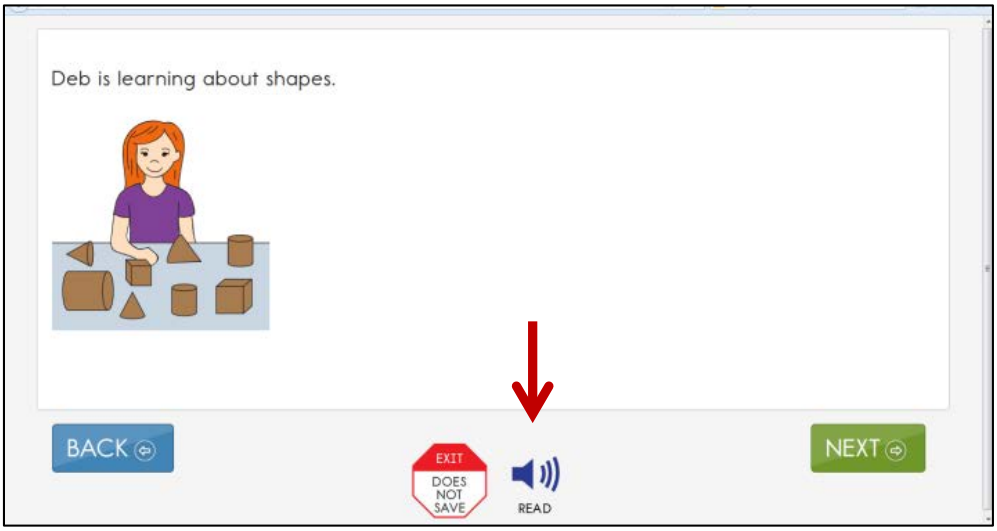


Spoken Audio

There are three types of spoken audio options: text only, text and graphics, and nonvisual. The text and graphics option and nonvisual option provide audio for images in addition to reading the on-screen text. The nonvisual option is intended for students that have no vision and therefore need the layout of the page described as well. For example, on technology-enhanced items, the spoken audio would include information about choosing options on the left side of the screen and moving them to areas on the right side of the screen. The text only option is appropriate when the student has some vision and does not require read aloud of physical layout and directional information.

If the spoken audio feature is chosen, then an additional screen reader is not needed. The text only option does not provide audio for images on the screen.

The READ button is visible at the bottom of the screen upon opening the test, as shown in the following screenshot.



Once the READ button is clicked, the text is read aloud. As shown in the following screenshot, a sentence is highlighted while it is being read. Different information is read aloud depending on which option is selected in the PNP Profile: text and graphics, text only, graphics only, or nonvisual.

Testlet Information Pages and Accessibility

Testlet Information Pages (TIPs) provide test administrators with information specific to each testlet, including exceptions to allowable supports, alternate text to use with human read aloud, and appropriateness of calculator use. While a test administrator may normally use all PNP features and other supports described in the Allowable Practices section of the TEST ADMINISTRATION MANUAL, this area indicates when it is not appropriate to use a support on a specific testlet.

Test administrators receive the TIP through Educator Portal, after each testlet is assigned to a student. Review the TIP before beginning the student's assessment. More information about what is included in the TIP is provided in the TEST ADMINISTRATION MANUAL.

Step 5 – Prepare for the Assessment: Using the Chosen Accessibility Features and Supports

Testlets delivered directly to students via computer are designed with the assumption that students can interact with the computer independently, using special devices as needed, such as alternate keyboards, touch screens, or switches. For students who interact directly with the computer, most items are in a multiple choice format, with either text or images as answer choices. Some students are also given items that involve moving text or objects on screen, or that require them to match items on two lists. Each of these item types is described in the TEST ADMINISTRATION MANUAL.

Regardless of the type of DLM assessment administered to a student, educators need the following when beginning an assessment:

- Computer with KITE program loaded
- Student username and password
- Testlet Information Page (TIP)

In addition to these required items, educators may need the following:

- Assistive devices appropriate to the student (e.g., switch)
- Additional manipulatives familiar to the student to be used during the assessment (e.g., unit cubes)
- Concentration aides used by the student (e.g., stress ball)

Information about preparing for educator-administered and computer-delivered testlets is available in other manuals: TEST ADMINISTRATION MANUAL, ASSESSMENT COORDINATORS, DATA STEWARDS, and TECHNICAL LIAISONS, available on the DLM website under Assessments | Operational Testing (http://dynamiclearningmaps.org/content/operational-testing).

Accessibility Strategies

To help students prepare for the DLM assessment, educators should provide instruction similar to the assessment and reinforce similar vocabulary. By monitoring students' understanding through embedded assessment, using the representations and models students will see in the DLM assessment, and demonstrating the types of questions students will be asked, educators can help students develop comfort and confidence with test formats.

In addition, DLM has created online professional-development learning modules to help educators understand English language arts and mathematics content standards, the EEs, and their application to students with the most significant cognitive disabilities. Each of the interactive modules is short (30 to 45 minutes) and focuses on a single topic. Information about these modules is available on the Professional Development tab on the DLM website (http://dynamiclearningmaps.org/content/professional-development). These modules provide information and strategies to help educators instruct students based on the content tested in the DLM-AA system.

Step 6 – Evaluate the Accessibility Features and Supports Used After the Assessment

After the student completes both ELA and mathematics practice tests and actual assessments, the educators and IEP teams need to evaluate the overall use of the accessibility features. Educators will then be better informed and able to change or customize accessibility features for future assessments. A list of questions that educators and IEP teams can use to evaluate the accessibility features used by students follows (Thompson et al., 2005).

Questions to Guide Evaluation at the Student Level

1. What accessibility features did the student actually use during instruction and assessment?
2. What were the results of classroom assignments and assessments when accessibility features were used versus when not used?
3. If a student did not meet the expected level of performance, is it due to not having access to the necessary instruction, not receiving the appropriate supports, or using inappropriate accessibility features?
4. What is the student's perception of how well the accessibility features worked?
5. What combinations of accessibility features seemed to be effective?
6. What were the difficulties encountered in the use of the accessibility features?
7. What are the perceptions of educators and others about how the accessibility features appeared to work?
8. Did the students receive the accessibility features documented in their IEP?
9. Should the student continue to use the selected accessibility features? Are changes needed? Should the use of an accessibility feature be discontinued?

DLM Appendix

Enter Data in the Access (Personal Needs and Preferences) Profile

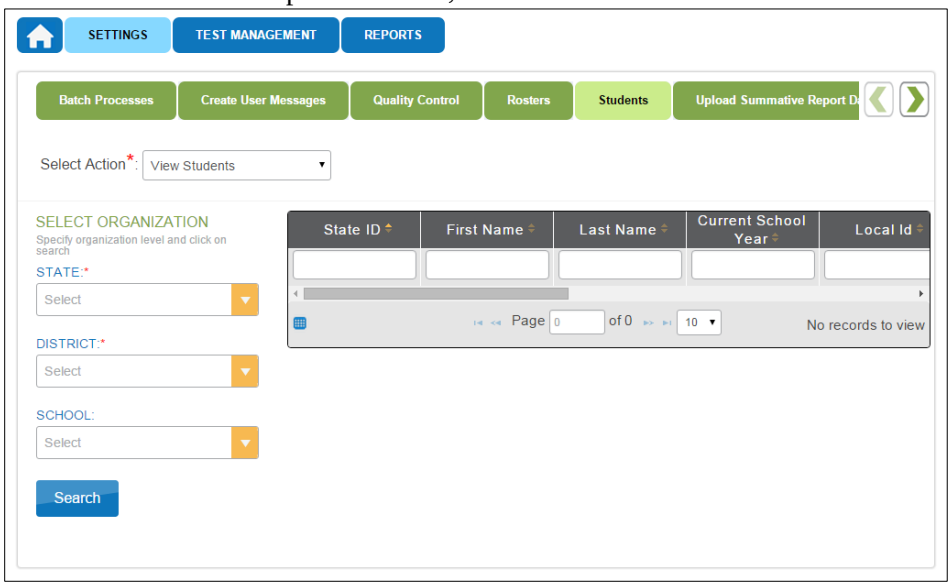
> Hint: Set aside 15-20 minutes to complete the PNP. Have the student's IEP at hand or know which supports the student currently receives.

To enter data in the Access Profile, follow these steps:

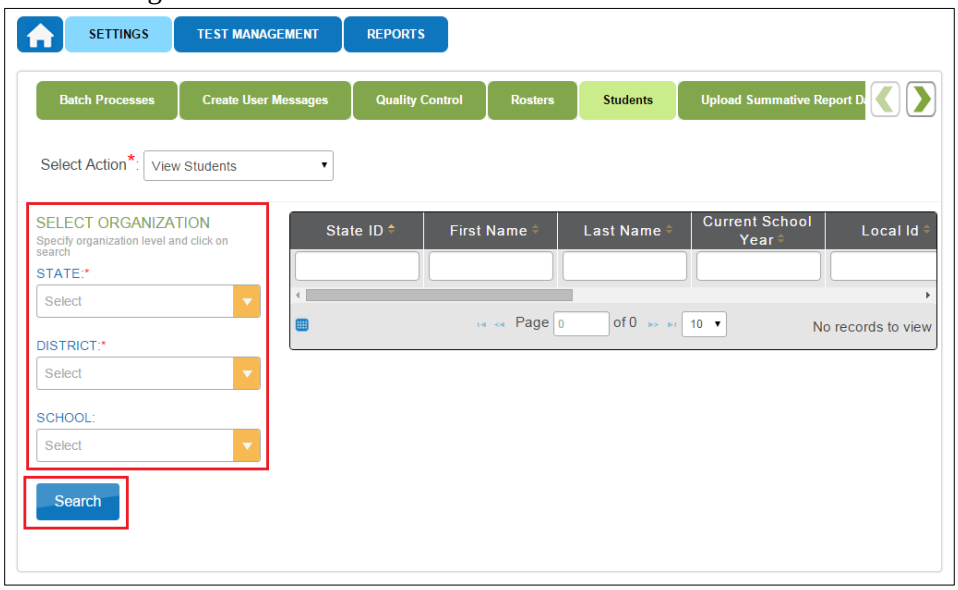
1. Log into Educator Portal. Click **Settings**.

2. Click **Students**.

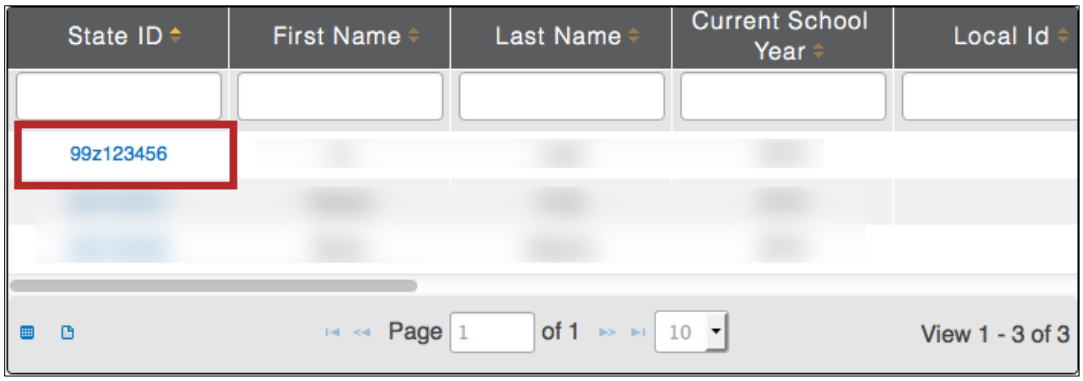
3. In the **Select Action** drop-down menu, click **View Students.**



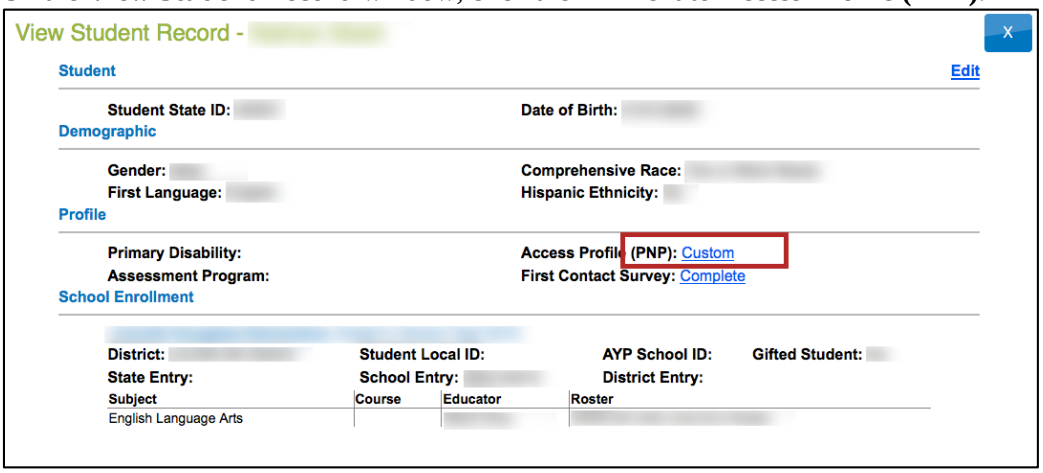
4. Select the organizational information and click **Search**.



5. In the list of students click the State ID for the student.

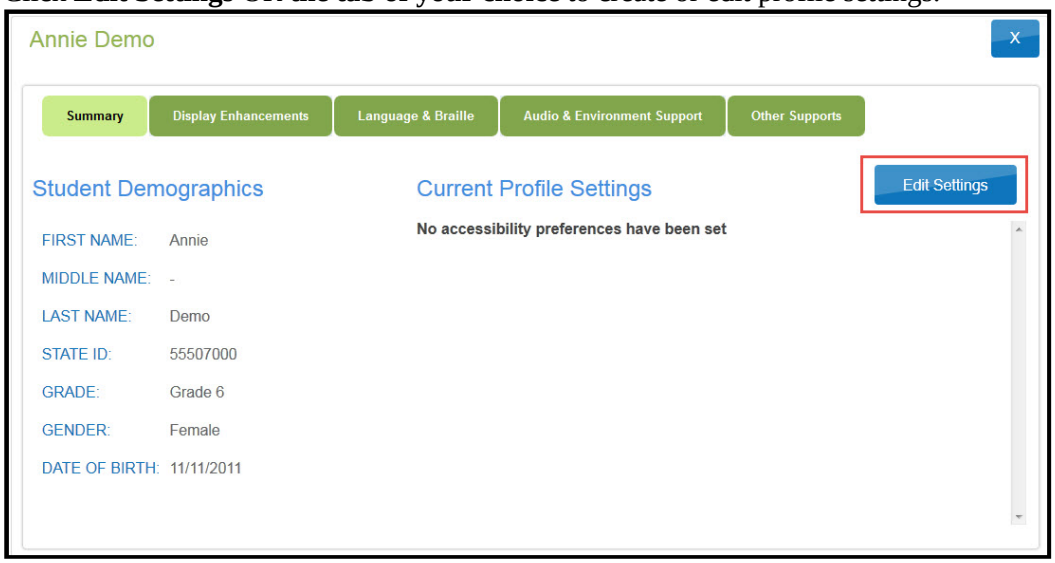


6. On the **View Student Record** window, click the link next to **Access Profile (PNP)**.



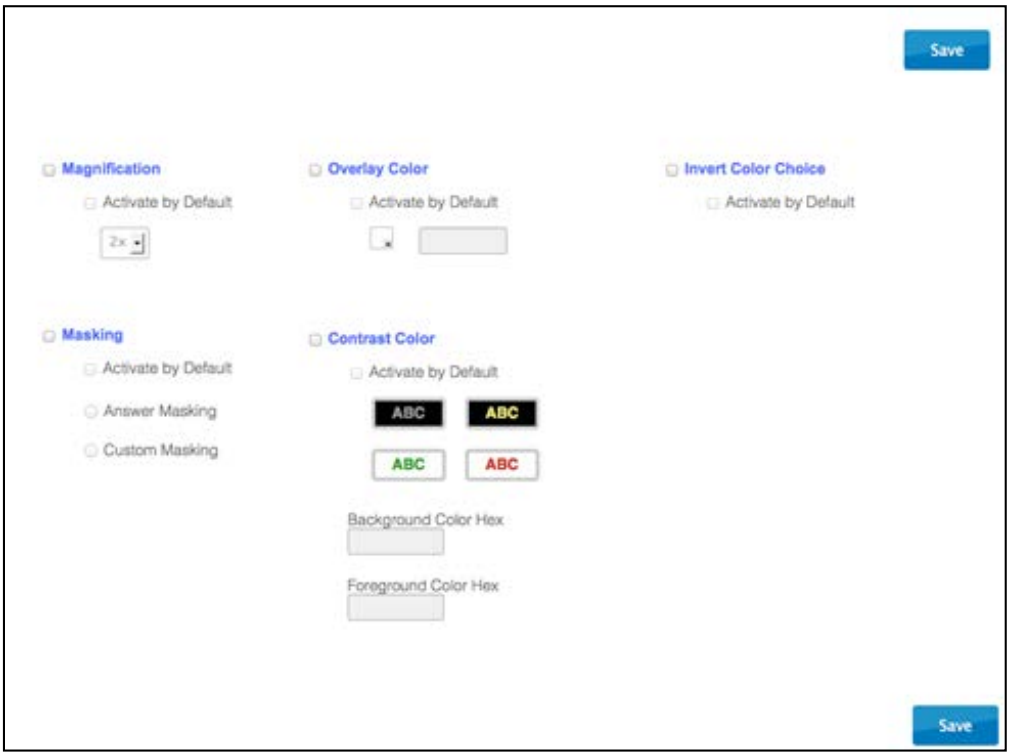
Hint: If you are creating a PNP, the link will read No Settings. If you are editing a PNP, the link will read Custom.

7. The **Summary** tab shows **Student Demographics** on the left and the **Current Profile Settings** on the right. The tabs at the top of the page break down accessibility options into categories. Click **Edit Settings** OR **the tab of your choice** to create or edit profile settings.



8. Review and select options.

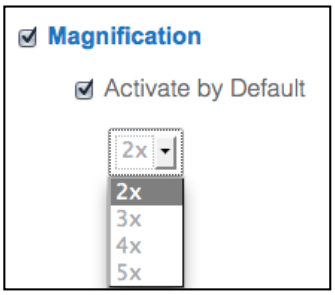
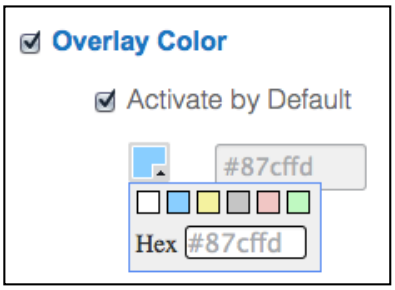
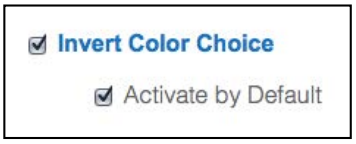
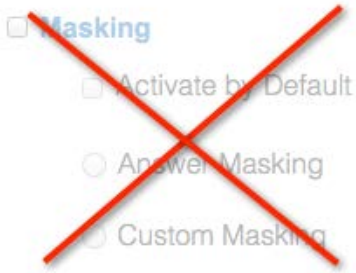
Note: While moving through the tabs, be sure to **Save**.

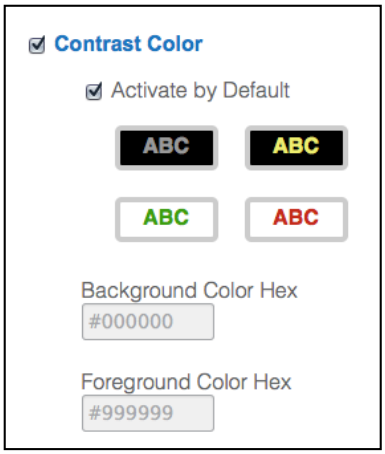


Note: Access Profile options are organization-specific. If an option is grayed out or not displayed in Educator Portal, it is unavailable for your organization.

Hint: Each enhancement includes an **Activate by Default** option. Always select this option when it is available.

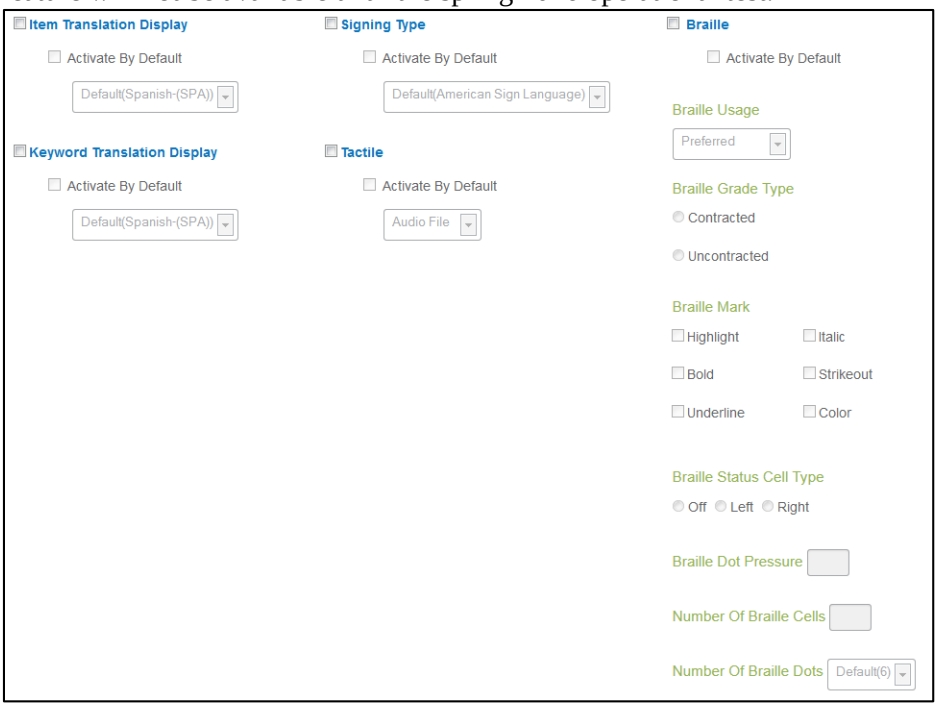
The following table describes the **Display Enhancements**.

Display Enhancement	Definition	Screen
Magnification	Magnification changes the amount of screen magnification during testing. Educators can choose between a magnification of 2x, 3x, 4x, or 5x.	
Overlay Color	The overlay color is the background color of the test. The default color is white; educators may select an alternate color.	
Invert Color Choice	The invert color choice will cause the test background to appear black with white lettering. Use contrast color to change the display to a different color scheme.	
Masking	Masking is not available to students taking DLM assessments.	

Display Enhancement	Definition	Screen
Contrast Color	The contrast color section allows educators to choose from several background and text color schemes.	

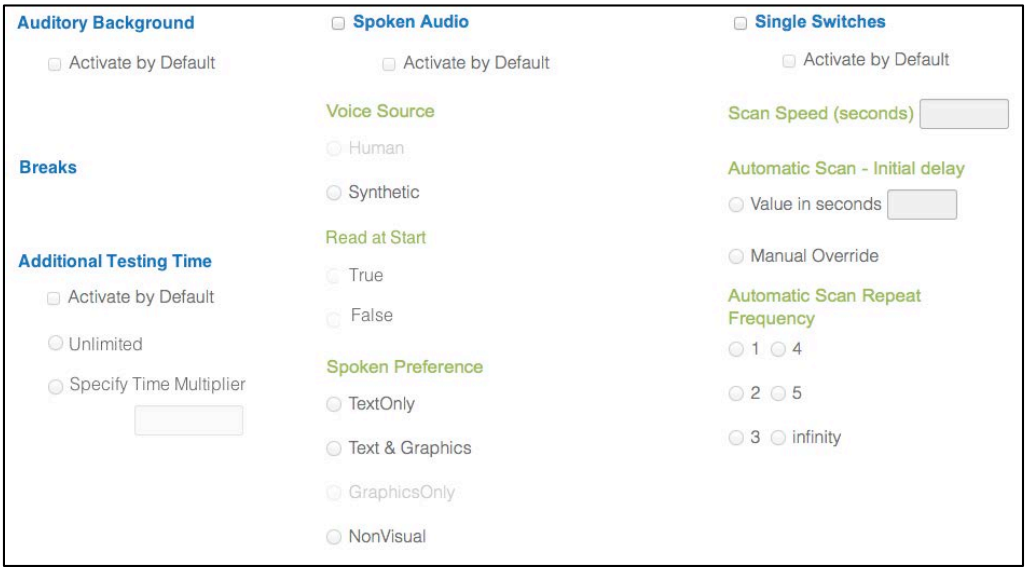
9. Click **Save** to save all information and move on to the next tab.

10. Click **Language & Braille** to review and select the support option related to language and braille. Note that uncontracted braille will be the only option on this screen available in DLM, and the feature will not be available until the spring 2016 operational test.

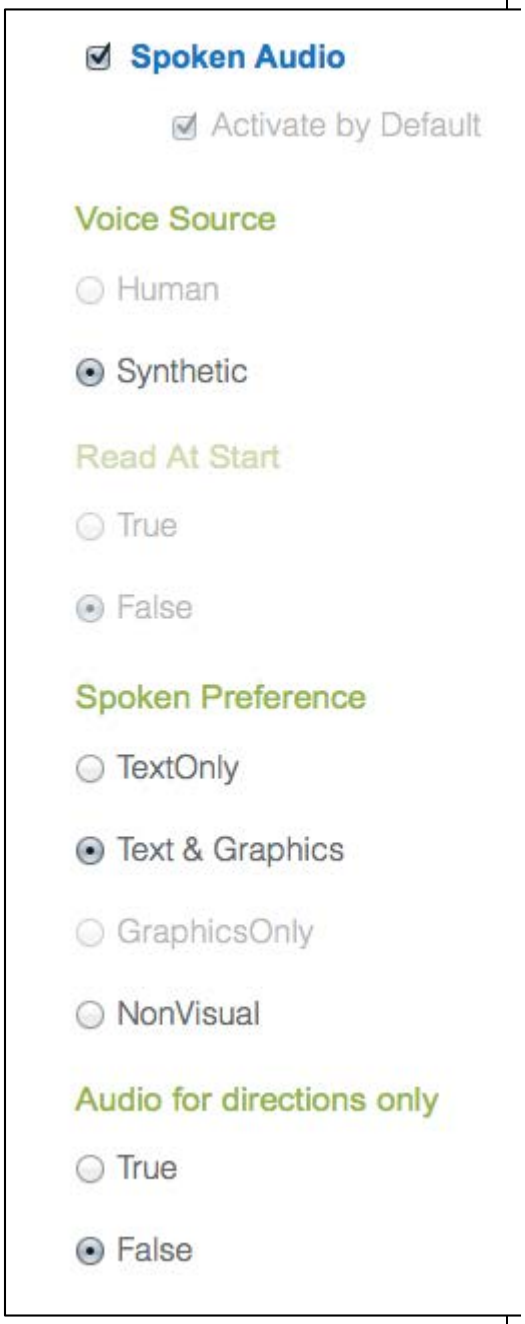


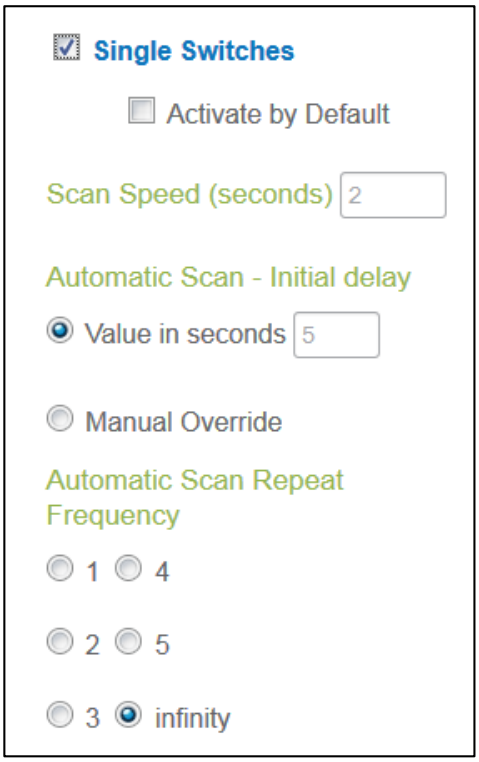
11. Click **Save**.

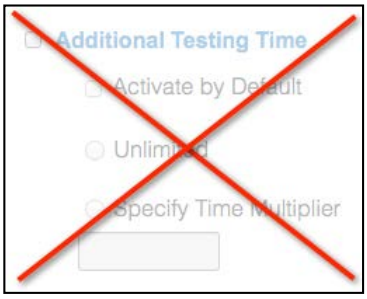
12. Click **Audio & Environment Support** to review and select support options related to read aloud and switch use.



The following table describes the **Audio & Environment Support** options.

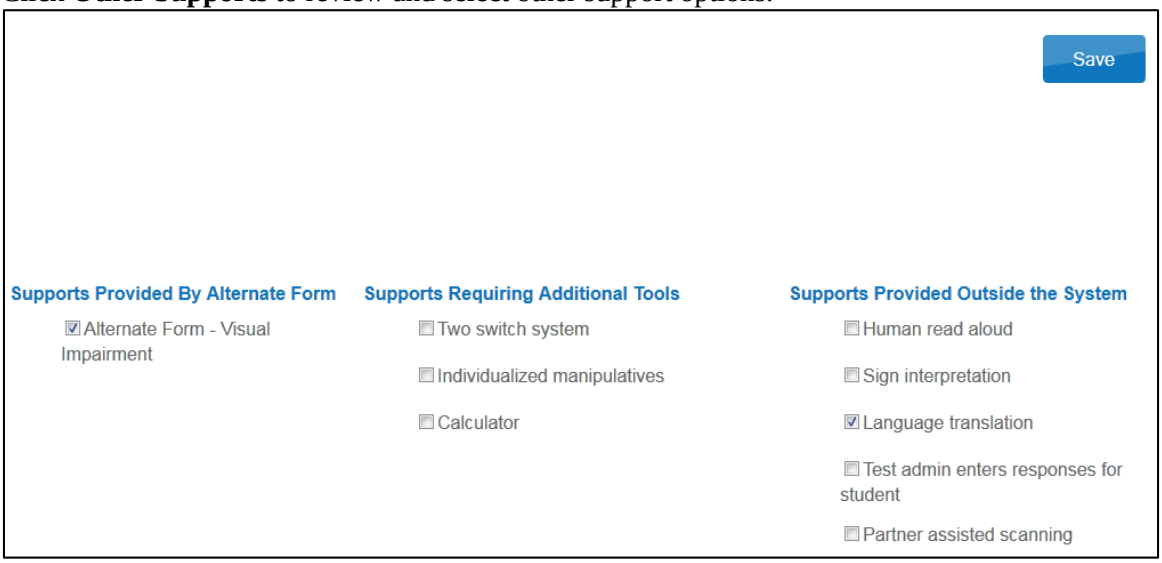
Audio & Environment Support	Definition	Screen
Auditory Background	Auditory background is not currently available in DLM.	
Spoken Audio	The graphic to the right indicates which features are currently available. Spoken Audio features selected may not appear in all testlets administered before March due to technology enhancements in progress. Use human read aloud when Spoken Audio is not available. For **Voice Source**, specify **Synthetic** for Spoken Audio. For **Read at Start,** specify **False** since this feature is not yet active. Using **Spoken Preference,** you can indicate which elements of a question should be read to the student. The system does not read the directions. Educators will continue to need to read the directions to the student. **Audio for directions only** is not available, choose **False.**	

Audio & Environment Support	Definition	Screen
Switches *Single-switch system* – Scanning is activated using a switch set up to emulate the Enter key. *Two-switch system* - The system automatically supports two-switch step scanning.	**Note:** Single-switch access should be selected for users requiring one switch automatic scanning. Two-switch access does not require any activation in the PNP. Any student can use two switches with a switch interface emulate the Tab key to move between choices and Enter to select. **Activate by Default** does not change how a switch works with the system. ■ **Scan Speed (seconds)** – The number of seconds that a particular item or row will be highlighted and available for selection before the system moves to the next item or row. The scan speed must be equal to or greater than the value entered under "Automatic Scan-Initial Delay". ■ **Automatic Scan-Initial Delay** – Allows you to specify whether scanning will begin automatically when a page appears. **Value in seconds** determines how long the system waits to begin scanning items after a page appears. **Manual Override** allows you to specify that the system will wait for the test taker to select the switch to initiate the scanning on a page. ■ **Automatic Scan Repeat Frequency** – Determines how many times the system will repeat the scan cycle before stopping when a selection is not made.	
Breaks	Not relevant for DLM assessments.	

Audio & Environment Support	Definition	Screen
Additional Testing Time	Not relevant for DLM assessments.	

13. Click **Save** to save all information and move to the next tab.

14. Click **Other Supports** to review and select other support options.

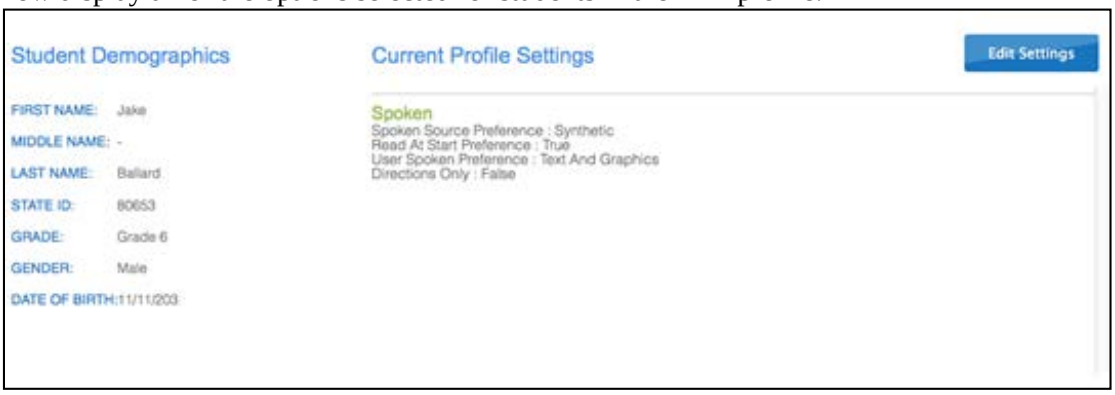


The following table describes Other Supports options.

Other Support	Definition
Supports Provided by Alternate Form	
Alternate Form – Visual Impairment	Most testlets designed for DLM students are accessible for students who are blind or have visual impairments (BVI). However, certain nodes in the learning map are difficult to assess online for students with visual impairments, even with the system features such as spoken audio. For these specific Essential Elements and linkage levels, the system will assign an alternate testlet form when the Alternate Form – Visual Impairment option is selected in the PNP.
Supports Requiring Additional Tools	
Two-Switch System	Two-switch scanning does not require any activation in the PNP. The system automatically supports two-switch step scanning with a switch interface and one switch set up to emulate the Tab key to move between choices, and the other switch set up to emulate the Enter key to select the highlighted choice.
Individualized Manipulatives	Educators may use manipulatives that are familiar to students (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters, etc.).
Calculator	Educators may use a calculator unless the TIP indicates a calculator may not be used.
Supports Provided by the Test Administrator Outside the System	
Human Read Aloud	The test administrator may read the assessment to the student. Read aloud the text on the screen and if needed, refer to the alternate text provided as part of the TIP for standardized descriptions of pictures and graphics. Descriptions of pictures and graphics should only be read aloud to students with visual impairments. To learn more about TIPs see the section titled Testlet Information Page in the TEST ADMINISTRATION MANUAL.
Sign Interpretation	For students whose primary mode of receptive communication is sign, test administrators may sign the assessment to the student using American Sign Language (ASL), Exact English, or personalized sign systems. Sign language interpreters should use the alternate text provided in the TIP for picture descriptions.
Language Translation	For students who are English learners and their best receptive communication is a language other than English, test administrators may translate the assessment for the student. Language translations are not provided via the computer.
Masking	Masking is not an option in KITE. The use of a piece of paper to cover portions of the screen to reduce visual clutter without otherwise decreasing the information or number of answer options is an acceptable support for students with visual impairments.
Test-Administrator Entering of Responses for Student	If students are unable to select their answer choices themselves, they may indicate their selected responses through normal response types and/or forms of communication, such as eye gaze, and then test administrators may key in those responses. This should only be used when students are unable to independently and accurately record their responses into the system.

Other Support	Definition
Partner-Assisted Scanning	PAS is a strategy in which test administrators assist students with scanning, or going through, students' answer choices. Students make indications when their desired choices are presented.

15. Click **Save**.
16. After all settings have been saved, you will be redirected to the **Summary** page**.** This page should now display all of the options selected for students in the PNP profile.



17. To change a setting, click **Edit Settings** and return to the tabs, saving changes on each screen. Log the student out of KITE and back in for the changes to take effect.

18. Click **X** to close the pop-up window.

Document History

Page numbers are valid ONLY for the date and version noted.
They may change in future versions.

Date	Section Name/ Summary of Changes	Starting Page
11/17/2015	Complete Access (Personal Needs & Preferences Profile) Updated content and screen shots connected to Spoken Audio and the Other Supports Tab	32
08/26/2015	Added Alternate Form – Visual Impairment to Table 1	14
05/28/2015	New publication for 2015-16 school year.	

References

Higher Education Opportunity Act, P.L. 110-315, § 103(a)(24) (2008)

Thompson, S.J., Morse, A.B., Sharpe, M., & Hall, S. (2005, August). *Accommodations manual: How to select, administer, and evaluate use of accommodations for instruction and assessment of students with disabilities* (2nd ed.). Washington, DC: Council of Chief State School Officers. Retrieved from http://www.osepideasthatwork.org/toolkit/accommodations_manual.asp

Thurlow, M., Ysseldyke, J., & Elliott, J. (1997). *Increasing the participation of students with disabilities in state and district assessments* (Policy Directions No. 6). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved from http://education.umn.edu/NCEO/OnlinePubs/Policy6.html

Glossary

display enhancements	Options to change the way the testlet appears on the screen, including magnification, color overlay, inverted color choice, and contrast color.
engagement activity	An activity that precedes a testlet and describes a scenario, accesses prior knowledge or experience, and/or introduces the concept to be addressed. In English language arts, the text often serves as the engagement activity. In math, the engagement activity provides context for the items.
Essential Elements (EEs)	Specific statements of knowledge and skills linked to the grade-level expectations identified in college and career readiness standards. Essential Elements build a bridge from the content in the college and career readiness standards to academic expectations for students with the most significant cognitive disabilities.
First Contact (FC)	A survey used to collect background information about students who are eligible for DLM assessments. The survey goes beyond basic demographic information and includes questions on topics such as communication, assistive technology devices, motor and sensory impairments, and academic performance. Some questions from the First Contact survey are used to determine a student's entry point, or initialization, into the assessment.
KITE	The Kansas Interactive Testing Engine (KITE) platform delivers assessments to students through the use of a customized, secure web browser accessible on multiple devices. All students taking the DLM assessment will have accounts in KITE Client. See the TEST ADMINISTRATION MANUAL for more information on KITE.
linkage level	A small section of the learning map that contains one or more nodes that represent critical concepts or skills needed to learn the Essential Element. Linkage levels are always related directly to grade-level Essential Elements but extend back to foundational skills at the Initial Precursor level. There are five linkage levels: Initial Precursor, Distal Precursor, Proximal Precursor, Target, and Successor. The nodes at the Target level are most closely related to the expectation in the grade-level Essential Element.
node	Nodes specify individual skills and understandings. Nodes are based on the research in mathematics and English language arts.
Personal Learning Profile (PLP)	The Personal Learning Profile consists of two sources of information: the Access (Personal Needs and Preferences (PNP)) Profile and the First Contact survey (FC). This information tells the system how to customize each student's experience and which test form to deliver from the appropriate linkage level (i.e., level of complexity)
Personal Needs & Preferences (PNP) Profile	Also Access Profile. Student-specific information that tells the DLM test-delivery system what the needs are for individual users. The PNP Profile includes information the system needs to make the student's user interface compatible with his or her accessibility needs. In DLM, the PNP Profile includes information about display enhancements, language and braille, and audio and environment supports. Educators who know the student provide the information in the profile.

technology-enhanced items	Computer-delivered test items that require a specialized interaction, such as click and drag. A technology-enhanced item is any item that is not direct selection.
testlet	Short for Instructionally-Relevant Testlet, a testlet contains an engagement activity and a set of three to eight items. Beginning with an engagement activity and combining multiple items increases the instructional relevance of the assessment, and provides a better estimate of the students' knowledge, skills, and abilities than can be achieved by a single test item. Thus, testlets are more reliable and valid indicators of the student's performance.

Abbreviations

DLM	Dynamic Learning Maps
DLM-AA	Dynamic Learning Maps Alternate Assessment
EE	Essential Element
ELA	English language arts
IEP	Individualized Education Program
PAS	Partner-Assisted Scanning
PLP	Personal Learning Profile
PNP	Personal Needs & Preferences
UDL	Universal Design for Learning

State Appendix

Supplemental Accessibility Information for [State]

Contents

Appendix A – Relevant Federal Legislation

No Child Left Behind Act of 2001

Stronger accountability for results is one of the four basic education reform principles contained in the No Child Left Behind Act of 2001 (NCLB). This law complements the provisions in providing public accountability at the school, district, and state levels for all students with disabilities. NCLB explicitly calls for:

> …the participation in such assessments of all students [Sec. 1111 (3) (C) (i)]. [The term 'such assessments' refers to a set of high-quality, yearly student academic assessments.] The reasonable adaptations and accommodations for students with disabilities—as defined under Section 602(3) of the Individuals with Disabilities Education Act—necessary to measure the academic achievement of such students relative to state academic content and state student academic achievement standards [Sec. 1111 (3) (C)(ii)].

Individuals with Disabilities Education Improvement Act of 2004

The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) specifically governs services provided to students with disabilities. Accountability at the individual level is provided through IEPs developed on the basis of each child's unique needs. IDEA requires the participation of students with disabilities in state and district-wide assessments. Specific IDEA requirements include:

> Children with disabilities are included in general state and district-wide assessment programs, with appropriate accommodations, where necessary [Sec. 612 (a) (16) (A)]. The term 'individualized education program' or 'IEP' means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes…a statement of any individual modifications in the administration of state or district-wide assessments of student achievement that are needed in order for the child to participate in such assessment; and if the IEP team determines that the child will not participate in a particular state or district-wide assessment of student achievement (or part of such an assessment), a statement of why that assessment is not appropriate for the child; and how the child will be assessed [Sec. 614 (d) (1) (A) (V) and VI)].

Based on current trends, the use of assessments for accountability purposes will likely increase in the future, supported by other legislative initiatives passed by states in their efforts to implement educational reform (Thompson, et al., 2005).

Appendix B – Inclusion in Accessibility Manual is optional for states participating in other consortia

Accessibility Terms

Different assessment programs use different terms to describe accessibility features. In the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC), terms are used to distinguish which students are allowed which features. Because all students taking the DLM Alternate Assessment are students with disabilities, there is no need to distinguish between students with and without disabilities. The terms used in the DLM-AA distinguish between online accessibility features that can be selected via the PNP Profile, features that require additional tools or materials, and features that can be used outside of the system.

States can indicate which DLM supports need to be identified as accommodations and determined by the IEP team (Appendix C). Also, if it is helpful, educators can adapt DLM's terms to more closely relate to the terms used by their general assessment programs. The following discussion attempts to align the terms used in the PARCC and the SBAC general assessments with DLM accessibility features. However, this is not an exact fit.

PARCC

States participating in PARCC general assessments are using the following terms (https://www.parcconline.org/parcc-accessibility-features-and-accommodations-manual):

- *Features for all students:* Tools such as volume control and magnification. These are embedded through the PARCC online-delivery platform, or are part of the PARCC assessment administration.

In DLM, some of the supports provided via the PNP Profile may be comparable to the features for all students, as some DLM tools can be changed during assessment administration. Educators and students are encouraged to determine best fit by using the practice tests.

- *Accessibility features (identified in advance):* Accessibility features are available to all participating students who have been identified ahead of the PARCC assessment. These features include changing the background or font color onscreen, or using a screen reader.

In DLM, supports that require tools, materials, or aids outside of the DLM system will need advance planning.

- *Accommodations:* Accommodations are for students with disabilities, English learners, and English learners with disabilities. Accommodations increase access while maintaining a valid and reliable score.

This distinction is not needed in DLM. States can identify which DLM accessibility features should be considered an accommodation and thus be documented on the student's IEP (see Appendix C).

Smarter Balanced

States participating in Smarter Balanced general assessments are using the following terms (http://www.smarterbalanced.org/news/smarter-balanced-adopts-usability-accessibility-and-accommodations-guidelines/):

- *Universal tools:* Universal tools are available to all students based on student preference and selection, such as a calculator, highlighter, or glossary.

In DLM, some of the supports provided via the PNP Profile may be comparable to universal tools, as some DLM tools can be changed during assessment administration. Educators and students are encouraged to determine best fit by using the practice tests.

- *Designated supports:* Designated supports are features available to any student for whom the need has been indicated by an educator (or team of educators with parent/guardian and student), such as color contrast and masking.

In DLM, supports requiring additional tools, materials, or aids outside of the DLM system will need advanced planning.

- *Accommodations:* Accommodations are digitally-embedded and non-embedded features available to students for whom there is a need documented on an Individualized Education Program (IEP) or 504 accommodation plan, such as braille, tactile graphics, or ASL.

This distinction is not needed in DLM. States can identify which DLM accessibility features should be considered an accommodation and thus be documented on the student's IEP (see Appendix C).

Appendix C – DLM Accessibility Worksheet for Test Administrators and IEP Teams

States may use this worksheet to indicate which supports must be determined by IEP teams and to document the supports provided to each student.

Accessibility Feature	Support Provided Within KITE via the PNP Profile	Support Requires Additional Tools/Materials	Support Provided by the Test Administrator Outside the System	Support Requires IEP Documentation in STATE NAME	Support Selected for STUDENT NAME	Notes and Evaluation
Category 1						
Magnification	X					
Invert Color Choice	X					
Color Contrast	X					
Overlay Color	X					
Spoken Audio • **Text Only** • **Text & Graphics** • **Nonvisual**	 X X X					
Category 2						
Uncontracted Braille		X				
Single-Switch System (PNP Enabled)		X				
Two-Switch System		X				
Individualized Manipulatives		X				
Calculator		See TIP				
Category 3						
Human Read Aloud			X			
Sign Interpretation of Text			X			

Accessibility Feature	Support Provided Within KITE via the PNP Profile	Support Requires Additional Tools/Materials	Support Provided by the Test Administrator Outside the System	Support Requires IEP Documentation in STATE NAME	Support Selected for STUDENT NAME	Notes and Evaluation
Language Translation of Text			X			
Test-Administrator Entering of Responses for Student			X			
Partner-Assisted Scanning			X			