



**DYNAMIC**<sup>®</sup>  
LEARNING MAPS

---

# ACCESSIBILITY MANUAL 2016-17

Publication Date: 08/01/2016

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

When this manual is updated, the Revision Date will also be updated. A summary of changes is included in the Appendix under Document History.

Wells-Moreaux, S., Bechard, S., & Karvonen, M. (2016). *Accessibility Manual for the Dynamic Learning Maps® Alternate Assessment, 2016-2017*. Lawrence, KS: The University of Kansas Center for Educational Testing and Evaluation.

A special thanks to our state partners who provided helpful feedback and to Pat Almond for her assistance with conceptualizing accessibility for the Dynamic Learning Maps® Alternate Assessment System. We are grateful for your time and efforts to improve this document.

## FINDING HELP

When the information in this manual and resources from your state DLM webpage do not lead to solutions, these contacts can provide additional support.

HINT: Print this page and keep it handy!

For these items:	Contact:
<ul style="list-style-type: none"><li>• KITE Client installation</li><li>• General computer support</li><li>• Internet availability</li><li>• Display resolution</li><li>• Issues with sound, headphones, speakers, etc.</li></ul>	Local technology representative
<ul style="list-style-type: none"><li>• How to use KITE Client and Educator Portal</li><li>• Training requirements</li><li>• Assessment questions</li><li>• Assessment scheduling</li></ul>	Local assessment coordinator
<ul style="list-style-type: none"><li>• Data issues (rosters, enrollment, etc.)</li></ul>	Local assessment coordinator or data manager
<ul style="list-style-type: none"><li>• Test invalidation requirements</li><li>• Student IEP requirements</li><li>• Test window dates, extensions, requirements, etc.</li><li>• Test resets</li></ul>	Local assessment coordinator

### *If contacting the DLM Service Desk:*

- **Do not send any Personally Identifiable Information (PII)** for a student via email. This is a federal violation of the Family Education Rights and Privacy Act (FERPA). PII includes information such as a student's name or state identification number. Each state has unique PII requirements. Please check with your assessment coordinator to find out what student information can be legally emailed in your state.
- Do send:
  - your contact information (email address and name)
  - your school (include the district if contacting state level personnel)
  - error messages, including the testlet number if applicable to the problem

# ACCESSIBILITY MANUAL 2016-17

---

---

## CONTENTS

---

---

<b>OVERVIEW</b> .....	6
Audience and Purpose.....	6
What’s New in This Version?.....	6
About the Dynamic Learning Maps Alternate Assessment System.....	7
<b>ACCESSIBILITY BY DESIGN</b> .....	8
Accessible Content.....	8
Accessible Delivery.....	10
Item Types.....	12
Customization for Each Student.....	15
<b>SIX STEPS TO CUSTOMIZE DLM ACCESSIBILITY SUPPORTS FOR STUDENTS</b> .....	17
<b>Step 1: Include Eligible Students in the DLM Alternate Assessment</b> .....	18
Participation in a State Assessment.....	18
Participation Guidelines .....	18
<b>Step 2: Learn About the Accessibility Supports</b> .....	20
What Does the DLM Alternate Assessment Provide? .....	20
Support Categories .....	20
Timing and Setting Support Options .....	23
Supports Not Available in KITE Client .....	23
<b>Step 3: Discuss and Select Appropriate Accessibility Supports – Considerations for IEP Teams</b> .....	24
Who Decides What Accessibility Supports Are Needed? .....	24
Guiding Questions for Discussion and Selection of Appropriate Accessibility Supports.....	25
Combining Accessibility Supports with Flexibility in Test Administration Procedures.....	26
Testlet Information Pages and Accessibility .....	31
<b>Step 4: Select and View Supports in the KITE System</b> .....	32
Demonstration of Access Profile Supports: What Students Will See.....	32
<b>Step 5: Prepare for the Assessment – Using the Chosen Accessibility Supports</b> .....	39
Accessibility Strategies.....	39
<b>Step 6: Evaluate the Accessibility Supports Used After Assessments</b> .....	39

Questions to Guide Evaluation at the Student Level.....40

**REFERENCES..... 41**

**DLM APPENDIX..... 42**

**Glossary ..... 42**

**Other Supports..... 44**

**Appendix A: Relevant Federal Legislation..... 45**

**Appendix B: DLM Accessibility Worksheet for Test Administrators and IEP Teams  
..... 47**

**Document History ..... 49**

---

## OVERVIEW

---

### AUDIENCE AND PURPOSE

The Accessibility Manual for the Dynamic Learning Maps® (DLM®) alternate assessment provides guidance to state leaders, district staff, educators, and Individualized Education Program (IEP) teams on the selection and use of the accessibility supports available in the Dynamic Learning Maps system. Informed decision making regarding accessibility is critical to ensure successful and effective participation in the assessment. Educators should understand the full scope of accessibility provided through the DLM assessment design, the supports available via the online KITE™ Client interface, and the supports 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 supports in the DLM alternate assessment. Additional procedural information on manipulatives, braille testlets, language translation, and sign language is provided in the TEST ADMINISTRATION MANUAL and the EDUCATOR PORTAL USER GUIDE, available on the DLM website.

For instructions on selecting the supports appropriate for each student inside Educator Portal, see the EDUCATOR PORTAL USER GUIDE.

### WHAT'S NEW IN THIS VERSION?

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

Topic	Starting Page

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

## **ABOUT THE DYNAMIC LEARNING MAPS ALTERNATE ASSESSMENT SYSTEM**

The Dynamic Learning Maps Alternate Assessment System assesses what students with the most significant cognitive disabilities know and can do in English language arts (ELA), mathematics, and science<sup>1</sup> in grades 3–8 and high school.<sup>2</sup> The DLM system provides accessibility by design and is guided by the core beliefs that all students should have access to challenging, grade-level content, and that test administrators should adhere to the highest levels of integrity in providing instruction and in administering assessments based on this challenging content.

The DLM Alternate Assessment System includes computer-based assessments and an online dashboard for educators to manage student information. The DLM assessments can be administered on a variety of devices.

As DLM technology personnel, you will support the technology needs of test administrators and students who participate in the DLM alternate assessments.

In order to determine the accessibility supports needed for each student, educators should understand how the DLM alternate assessment is designed for accessibility from the beginning and how accessibility supports can be customized.

---

<sup>1</sup> Science is available in some states.

<sup>2</sup> Each state determines the required high school grades.

---

## ACCESSIBILITY BY DESIGN

---

### ACCESSIBLE CONTENT

Accessible content is essential to student success. The DLM Alternate Assessment Consortium has created accessible content by developing testlets at various complexity levels, multiple and alternate pathways to the nodes (the individual skills and understandings identified in ELA, mathematics, and science), by creating item-writing guidelines based on universal design, and 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 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 or educators provide in the First Contact (FC) 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 DLM maps.

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

For each EE, the DLM alternate assessment 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(s) in the DLM map section that most closely match the EE. Nodes specify individual skills and understandings that were identified in the research in mathematics and English language arts. Target-level testlets are developed based on these nodes. Then, multiple pathways on the map are carefully inspected to identify nodes that link 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, specifying 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 DLM 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 instructions within the testlet and then records the student’s responses in KITE Client.

There are two additional linkage levels between the Initial Precursor and the Target: the Distal Precursor and the Proximal Precursor. These linkage levels reflect nodes along the multiple pathways in the DLM map that extend down from the Target to the Initial Precursor as demonstrated in Figure 1.

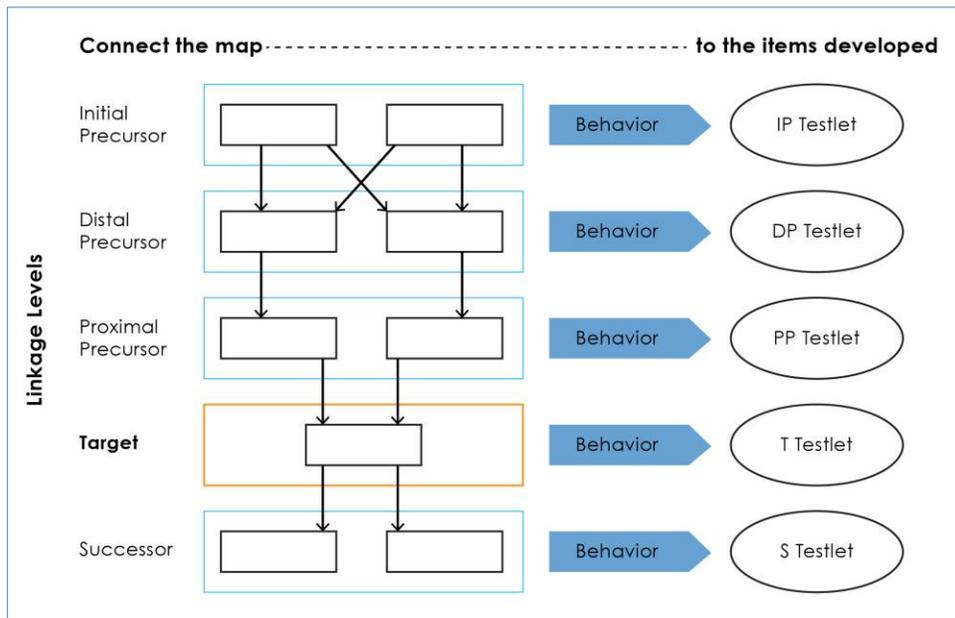


Figure 1. Linkage levels determine testlet development contents.

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. Table 1 further describes how to determine a linkage level for a student.

Table 1 Correspondence Among Student Characteristics Recorded on First Contact Survey, Complexity Bands, and Linkage Levels

Common First Contact Survey Responses About the Student	First Contact Complexity Band	Linkage Level
Does not use speech, sign, or AAC; does not read any words when presented in print (ELA); or does not sort objects (math)	Foundational	Initial Precursor
Uses one word, sign, or symbol to communicate;	Band 1	Distal Precursor

Common First Contact Survey Responses About the Student	First Contact Complexity Band	Linkage Level
recognizes symbols (ELA) or sorts symbols (math)		
Uses two words, signs, or symbols to communicate; reads at the primer to second grade level (ELA); or adds/subtracts up to 80% of the time (math)	Band 2	Proximal Precursor
Regularly combines three or more spoken words to communicate for a variety of purposes; able to read print at the third grade level or above (ELA) or regularly add/subtract and form groups of objects (math)	Band 3	Target

Information gathered in the First Contact survey and the ongoing performance by the student determine which linkage level(s) of complexity are most accessible and appropriate for each student.

### **ACCESSIBLE DELIVERY**

Testlets are delivered differently in ELA, mathematics, and science 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 items appropriately embedded within the text as well as items placed at the end of the text when necessary. Embedded items reduce cognitive load and reliance on long-term memory.

During writing assessments, the test administrator follows a standardized procedure in which the student selects a topic and writes about the selected topic. A series of screens in KITE Client 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. In both types of writing testlets, students work outside of KITE Client, using orthography-based tools used for writing in everyday instruction. Students should use standard pens, pencils, keyboards, or other tools that offer access to all 26 letters of the alphabet. The test administrator observes the student's writing and responds to items about the student's writing in the testlet in KITE Client. See the TEST ADMINISTRATION MANUAL for full descriptions.

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 items. The engagement activity does not include any items or require a response. Mathematics testlets are built around a common scenario in order to investigate related facets of student understanding of the targeted content.

Science testlets are provided for elementary school, middle school, and high school grade bands at Target, Precursor, and Initial levels. The testlet engagement activities are similar to the English language arts and mathematics engagement activities. The first presentation familiarizes the student with the text. The second presentation has embedded items within and/or at the end of the activity. Other testlets have a short engagement activity or context presented once and items are at the end of the activity. Science testlets begin with an engagement activity just like testlets in ELA and math. These engagement activities are designed to motivate students, provide a context, and activate prior knowledge. Science testlets may be designed around a science story featuring an experiment or classroom activity that is presented twice with items embedded within the second presentation of the activity and/or with the items presented at the end of the second presentation. For shorter science stories, testlets may simply provide a context for the items. In this case, the science story is presented a single time and all items appear at the conclusion of the activity.

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 educator 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 in a 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

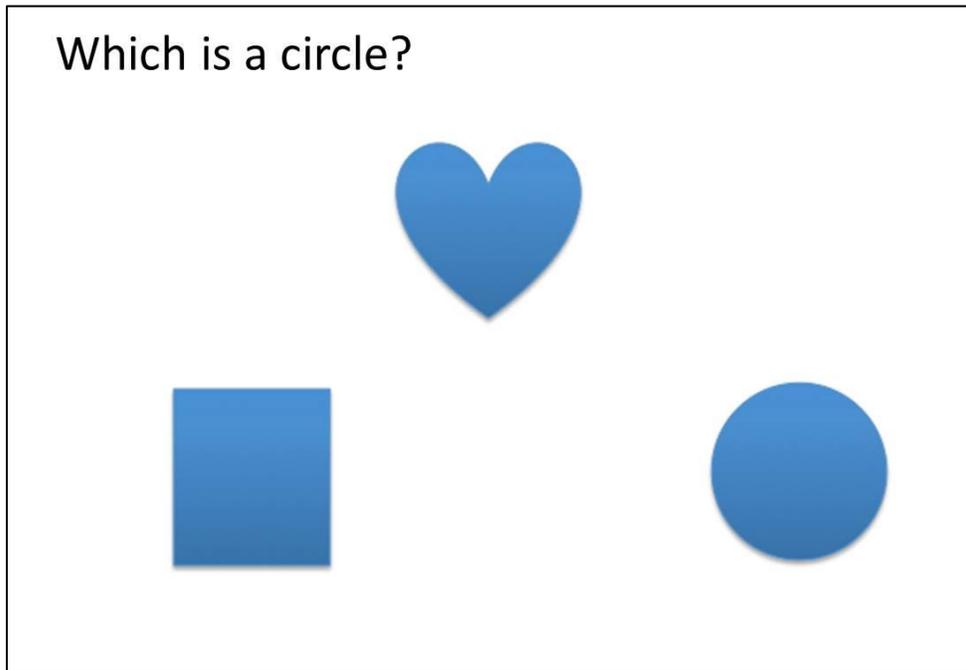


Figure 2. Single-select and multi-select multiple choice, with text or images as response options.

Match the symbol to the name. One symbol will not have a match.

=	subtraction sign
+	addition sign
x	equal sign
-	

Figure 3. Matching items from two lists.

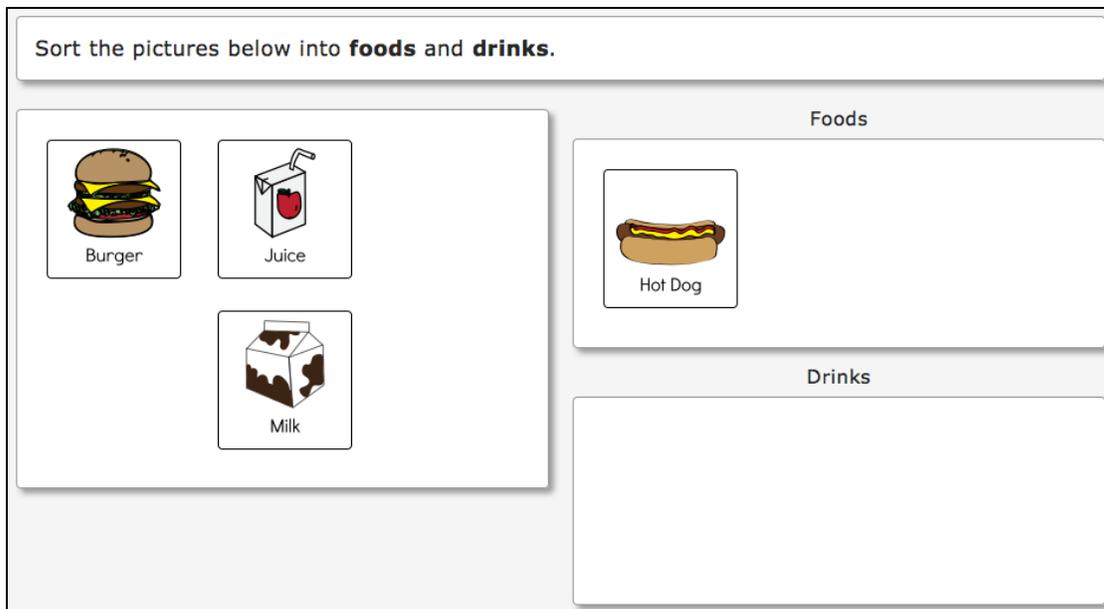
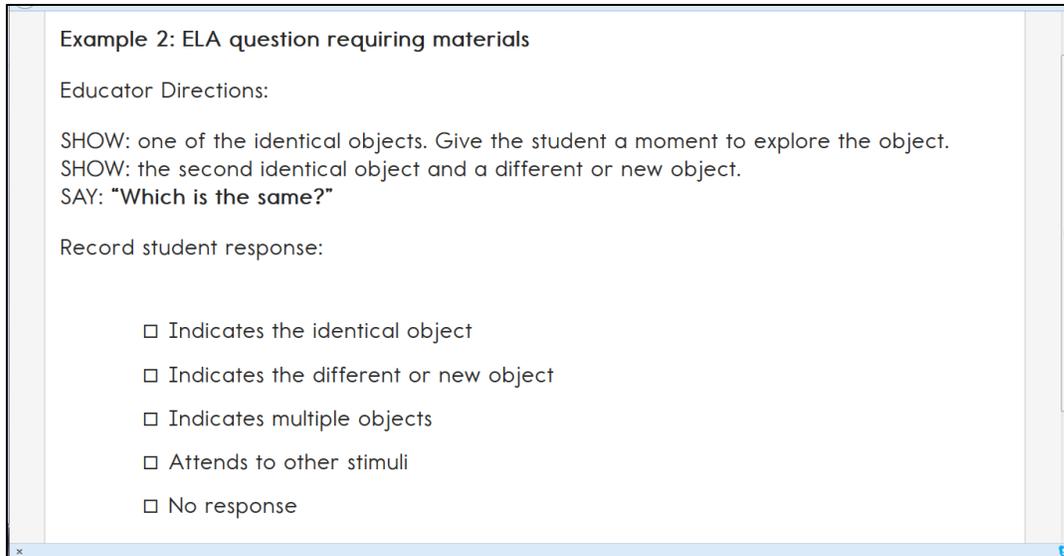


Figure 4. Sorting items into categories by selecting images and placing them in the appropriate box.



Figure 5. Selecting the appropriate word, phrase, or sentence in a short passage to respond to an item.

Some testlets are designed so educators can administer them outside KITE Client, with step-by-step guidance provided in the testlet. Then the test administrator records responses in KITE Client, 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 6.



*Figure 6. Educator observation item where the test administrator interacts directly with the student and reports the student's response into KITE Client.*

## CUSTOMIZATION FOR EACH STUDENT

Two sources of information provide access to assessment: the Access Profile (AP) and the First Contact survey. The content from the Access Profile informs KITE Client how to customize each student's assessment experience and which assessment form to deliver from the appropriate linkage level (i.e., level of complexity).

Educators use the Access Profile in Educator Portal to select the appropriate accessibility supports within the system, and thus tailor each student's assessment experience based on individual needs. Best practice is for test administrators to complete the Access Profile before assessment begins. The Access Profile can also be adjusted as a student's needs change, even during an assessment window. Category 1 supports such as display enhancements or Text-to-Speech can be changed at any time, even in the middle of a testlet.

The process for changing Category 1 supports:

- While a testlet is in progress, if the supports are negatively affecting the student's experience and ability to answer questions, click on **EXIT DO NOT SAVE**. The testlet will end without saving any answers.
- The test administrator will then change and save the new Category 1 support choices in the Access Profile.
- After a period of 15 minutes, the student can log in to KITE Client again and see the same testlet, but now with the new, more appropriate Category 1 support options.

---

**NOTE:** **EXIT DOES NOT SAVE** is not allowed in some states. Consult with your assessment coordinator before using this option. Best practice is to use the practice testlets with the student prior to test administration so the student is able to try out the Access Profile supports.

---

Category 2 supports require additional tools/materials such as braille and single and two-switch scanning. These can also be changed, but unlike Category 1, these changes cannot be made in the middle of an assessment session. If the test administrator determines that Category 2 options need to be changed, the following process must be followed:

- The student must continue and submit the current testlet in which he/she is testing.
- The test administrator will then change and save the new Category 2 support choices in the Access Profile.
- After a period of 15 minutes, when the next testlet is presented, the new Category 2 supports will be available.

See *Table 2, Accessibility Supports of the DLM Assessment System*, on page 20.

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 the first assessment. Instructions on how to fill out the FC survey are located in the EDUCATOR PORTAL USER GUIDE.

The access supports in the Access Profile are listed in five tabs: Summary, Display Enhancements, Language & Braille, Audio & Environment Support, and Other Supports. The Access Profile is not unique to the DLM alternate assessment; it is used for different assessment programs and follows industry standards for computer access. As a result, some supports are not relevant to the DLM alternate assessment, as shown in the instructions in the following section. All non-applicable supports have been deactivated in the system. Figure 7 shows a screenshot of the summary page, and the accessibility tabs in the Access Profile.

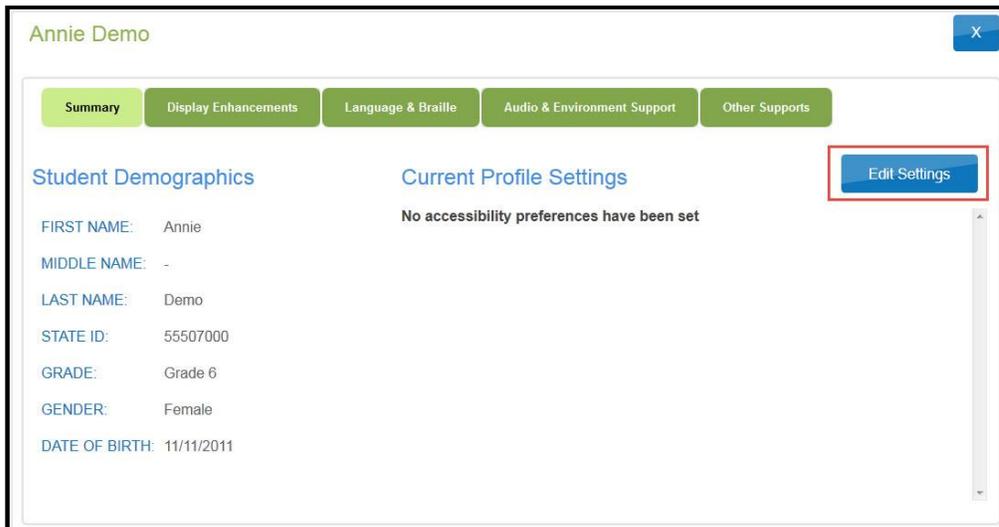


Figure 7. Accessibility supports tabs.

---

## SIX STEPS TO CUSTOMIZE DLM ACCESSIBILITY 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 supports used in KITE Client by students with the most significant cognitive disabilities.

- Step 1: Include Eligible Students in the DLM Alternate Assessment
- Step 2: Learn About the Accessibility Supports and what the DLM Alternate Assessment Provides
- Step 3: Discuss and Select Appropriate Supports: Considerations for IEP Teams
- Step 4: Selecting and Viewing Supports in the KITE System
- Step 5: Prepare for the Assessment: Using the Chosen Accessibility Supports
- Step 6: Evaluate the Accessibility Supports Used After the Assessment

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

## **STEP 1: INCLUDE ELIGIBLE STUDENTS IN THE DLM ALTERNATE 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 that students with the most significant cognitive disabilities participate in standards-based instruction and assessment initiatives. These include federal laws such as No Child Left Behind of 2001 (NCLB), the Individuals with Disabilities Education Improvement Act of 2004 (IDEA), and the Every Student Succeeds Act, which goes into effect in 2017.

### ***PARTICIPATION GUIDELINES***

Students with the most significant cognitive disabilities have 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. In other words, the most significant cognitive disabilities impact students both in and out of the classroom. The DLM alternate assessment is designed for students with these significant instruction and support needs.

The DLM alternate assessment provides three general participation criteria.

- 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.
- The student is primarily instructed using the Essential Elements (EEs) 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.
- 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.

The following are not allowable (or acceptable) considerations for determining participation in the DLM alternate assessment.

1. A disability category or label
2. Poor attendance or extended absences

3. Native language/social/cultural or economic difference
4. Expected poor performance on the general education assessment
5. Academic and other services student receives
6. Educational environment or instructional setting
7. Percent of time receiving special education
8. English Language Learner (ELL) status
9. Low reading level/achievement level
10. Anticipated student's disruptive behavior
11. Impact of student results on accountability system
12. Administrator decision
13. Anticipated emotional duress
14. Need for accommodations (e.g., assistive technology/AAC) to participate in assessment process

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

## STEP 2: LEARN ABOUT THE ACCESSIBILITY SUPPORTS

### WHAT DOES THE DLM ALTERNATE ASSESSMENT PROVIDE?

This section identifies the accessibility supports available for students taking the DLM alternate assessment and distinguishes between accessibility supports that (1) can be utilized by selecting online supports via the Access Profile, (2) require additional tools or materials, and (3) are provided by the test administrator outside the system. Table 2 shows which supports fall under each of these categories. Each support is described in the following section. If your state requires documentation about certain accessibility supports 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 alternate assessment, 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 supports.

Table 2. Accessibility Supports of the DLM Assessment System

Category 1 Supports Provided in KITE Client Via Access Profile	Category 2 Supports Requiring Additional Tools/Materials	Category 3 Supports Provided Outside the System
<ul style="list-style-type: none"> <li>▪ Magnification</li> <li>▪ Invert Color Choice</li> <li>▪ Color Contrast</li> <li>▪ Overlay Color</li> <li>▪ Spoken Audio</li> </ul>	<ul style="list-style-type: none"> <li>▪ Uncontracted Braille</li> <li>▪ Alternate Form-Visual Impairment</li> <li>▪ Single-switch System /Access Profile Enabled</li> <li>▪ Two-switch System</li> <li>▪ Individualized Manipulatives</li> <li>▪ Calculator</li> </ul>	<ul style="list-style-type: none"> <li>▪ Human Read Aloud</li> <li>▪ Braille-BVI-Read Aloud</li> <li>▪ Sign Interpretation of Text</li> <li>▪ Language Translation of Text</li> <li>▪ Test Administrator Entering of Responses for Student</li> <li>▪ Partner-Assisted Scanning (PAS)</li> </ul>

### SUPPORT CATEGORIES

#### Category 1 Supports provided within KITE Client via the Access Profile

Online supports include magnification, invert color choice, color contrast, and overlay color. Directions detailing how to select the supports provided by the Access Profile are found in Step 4: Selecting and Viewing Supports in the KITE System.

Educators are advised to test the following options in advance to make sure they are compatible and provide the best access for students. See the Guide to Practice Activities and Released Testlets on the DLM website ([www.dynamiclearningmaps.org](http://www.dynamiclearningmaps.org)) for more information.

- **Magnification:** Allows educators to choose the amount of screen magnification during assessment. 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 assessment. The default color is white. Educators may select from the alternate colors of blue, green, pink, gray, and yellow. Practice demo testlets have specific presets, but there are more options provided in the Access Profile and actual live testlets.
- **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 or have visual impairments).

Screenshots showing these supports begin in the section *Demonstration of Access Profile Supports: What Students Will See* on page 32.

### **Category 2 Supports require 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 Access Profile. Practice activities and released testlets with supports are available through several demo student accounts. See the *TEST ADMINISTRATION MANUAL* for a list of demo logins for practice testlets.

- **Uncontracted Braille:** All braille forms use uncontracted braille and are available in English Braille American Edition (EBAE). Braille forms are available only for the spring assessment. Braille will not be available in Access Profile for selection at the opening of the school year, but will be available before the opening of the spring assessment window. Prior to the opening of the spring assessment window, the test administrator will need to select EBAE braille in the Access Profile.
  - Braille is not available at all linkage levels nor for every testlet. Braille is only available in grades 3-5 at the Target and Successor levels and in grades 6-HS in the Proximal Precursor, the Target, and the Successor linkage levels. If a student's Access Profile is marked for braille, the system will deliver braille when available. Where braille is not provided, test administrators will use other approaches such as Alternate Form-Visual Impairment to deliver assessments to students who are blind or have visual impairments. Braille should not be selected for emerging braille readers. Braille should only be selected if the student is proficient in reading braille materials. The DLM

alternate assessment is designed to assess a student's knowledge, skills, and understanding of the EEs, not the student's ability to use braille. When a braille form is not available for a testlet, the system will deliver a form tagged with BVI. If BVI is unavailable, KITE Client will deliver a standard form that is commonly tagged to enable Read Aloud. A test administrator can also use human read aloud.

- **Alternate Form-Visual Impairment:** The educator should choose "Alternate Form-Visual Impairment" when a student does not read braille but is blind or has a visual impairment that prevents interaction with the onscreen content. These testlets are teacher-administered, not braille, and are available for a limited number of EEs and levels.
- **Single-Switch System:** This support activated using a switch and switch interface that emulates the Enter key on the keyboard. In the Access 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 Access 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:** Students may use familiar manipulatives (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters, etc.). Refer to the Testlet Information Page (TIP) for more information.
- **Calculator:** Permitted on mathematics testlets unless it interferes with the construct of the testlet. The TIP for each mathematics testlet will specify whether or not a calculator is permitted.

### **Category 3 Supports provided by the test administrator outside KITE Client**

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

- **Human Read Aloud:** Test administrators may read the assessment aloud to students. See the TEST ADMINISTRATION MANUAL for additional information.
- **Braille-BVI-Read Aloud:** If a student reads braille, the student's Access Profile should be marked with braille, BVI, and Read Aloud. When a braille form is not available for every testlet, the system will deliver a form tagged with BVI. If BVI is unavailable, a standard form is tagged to enable Read Aloud. A test administrator can also use human read aloud.
- **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 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, gesture). 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 KITE Client.
- **Partner-Assisted Scanning (PAS):** A strategy where test administrators assist students with scanning or going through, students' response options. Test administrators read and/or point to each response option, and the students indicate when their desired choice is presented.

#### ***TIMING AND SETTING SUPPORT OPTIONS***

Timing and setting options are not defined in KITE Client because assessments are not timed and are 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 assessment time that the student needs is permissible. For example, the student may take as many breaks as needed throughout the assessment. Although KITE Client can sit inactive for up to 90 minutes before automatically logging out, the best practice is to not pause for more than 30 minutes. If additional time is needed, the student will need to be logged back into KITE Client. Any items that have been completed will be saved.

#### ***SUPPORTS NOT AVAILABLE IN KITE CLIENT***

IEP teams may be accustomed to seeing more supports than provided in the KITE system, especially when they consider supports that students with the most significant cognitive disabilities may need for general education assessments. Some supports that might be expected, but are not available include:

- Sign language using human or avatar videos on screen. The majority of eligible students communicate with sign language use Exact English or personalized sign systems.
- Tactile graphics. Instead, the assessments incorporate 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 SUPPORTS—CONSIDERATIONS FOR IEP TEAMS**

KITE Client allows many computer-based accessibility supports for a student to use during assessment, such as various font colors or magnification sizes. In a student's Access Profile, the educator may choose from a number of KITE Client supports, both those required to meet the student's needs, such as those listed in the student's IEP, and other features not listed in the IEP but for which a student may show a preference. The Access Profile may be adjusted between testlets in an effort to provide more appropriate supports if the initial Access Profile choices are not allowing the student to fully access the content of the testlets. IEP teams should refer to their state's specific guidance regarding the IEP team involvement in Access Profile choices prior to test administration and adjustments to Access Profile made during test administration.

A student should not enter a DLM assessment using a new, unfamiliar KITE Client support or combination of supports if the student has not been able to practice using them during regular instruction. Unfamiliar features could be distracting and even detrimental during assessment.

#### ***WHO DECIDES WHAT ACCESSIBILITY SUPPORTS ARE NEEDED?***

Educators should choose accessibility supports based on an individual student's needs as determined by the IEP team, 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.

Students can gain experience with the specific KITE Client supports by using DLM practice activities and released testlets. These activities are intended for three main purposes:

1. to help an educator draw conclusions about the student's ability to use a selected KITE Client support;
2. to make decisions about which Access Profile support(s) best fit the student's individual needs and preferences; and
3. to provide the student with opportunities to practice using the navigation tools in the testlets prior to the day of the student's first assessment.

Released testlets will be available for every grade level for the 2016-2017 school year to allow the student to practice as often as needed using any of the KITE Client supports and to allow the educator to observe the student's interaction with those supports. The educator can change the selections in the Access Profile, depending on the conclusions drawn about the student's experience with the testlets. Additionally, repeated practice can help the student and the educator to be more at ease on the day the assessment window opens.

## ***GUIDING QUESTIONS FOR DISCUSSION AND SELECTION OF APPROPRIATE ACCESSIBILITY SUPPORTS***

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?

(Thompson et al., 2005)

Educators may also need to amend a student's IEP to include any additional, appropriate supports available in KITE Client that were not listed on the IEP, depending on state policy. Educators should check with their state for specific policies.

The user interface in KITE Client 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. Test administrators may also help students navigate across screens or enter responses that students select during the assessment. The following section describes additional allowable supports.

***COMBINING ACCESSIBILITY SUPPORTS WITH FLEXIBILITY IN TEST ADMINISTRATION PROCEDURES***

Effective use of the Access Profile options allows most students appropriate access to the assessment, making the DLM alternate assessment a meaningful indicator of students' knowledge and understanding of the EEs. However, educators may need to combine accessibility supports listed on the Access Profile with practices that are part of the allowable flexibility in test administration procedures. More information about allowable practices is provided in the TEST ADMINISTRATION MANUAL.

When customizing the assessment process using accessibility supports and allowable practices, 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 accessibility issues and potential solutions that are based on a combination of accessibility supports and allowable practices. The table includes suggestions for computer-administered and teacher-administered testlets. Further guidance on allowable practices is provided in the TEST ADMINISTRATION MANUAL.

*Table 3. Common Accessibility Issues and Solutions.*

Accessibility Issue	Example Solutions
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 response options to the test administrator, and the test administrator may enter the responses on behalf of the student. The test administrator may only repeat the item as written until the student makes a choice.
The student is blind 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 EEs. 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.

Accessibility Issue	Example Solutions
<p>The student has a severe visual impairment and needs larger presentation of content than the 5x magnification setting provides.</p>	<p>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.</p>
<p>The student uses sign language to communicate and has limited proficiency in reading text.</p>	<p>The test administrator may sign the text, spelling unfamiliar words and adapting or interpreting the language as needed based on signs the student is familiar with.</p>
<p>The student uses low-tech (i.e., not computerized) eye gaze to communicate.</p>	<p>The test administrator may represent the response options in an alternate format or layout off the computer and enter the student's selected responses.</p>
<p>The student uses eye gaze or another means to indicate yes/no responses.</p>	<p>The test administrator may present the item and options as described: First, read the item and go over the response options (in the same order as presented on screen). Then, repeat the item and present response option one, yes/no; response option two, yes/no; and response option three, yes/no.</p>
<p>The student can only be presented two response options at one time.</p>	<p>Choose the appropriate solution.</p> <p>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.</p> <p>OR</p> <p>The test administrator may present two response options at a time until narrowing down to a single response from the student. To maintain validity, present the options in the same order they are presented in the testlet. Present option 1 and option 2. Present the student's response option and option 3.</p>

Accessibility Issue	Example Solutions
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 response option. The student should indicate when the desired response option is presented. The test administrator may also navigate from screen to screen and allow the student to use scanning to select the desired response on each item screen.
The student is blind 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 items.	The test administrator may use the equipment and materials the student is familiar with. The student should still interact with the content on the screen, but the test administrator may navigate and enter responses that the student has demonstrated outside KITE Client.
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 the DLM alternate assessment 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.

While there is considerable flexibility in allowable practices during assessment administration, there are some practices that are not allowed. These are described further in the TEST ADMINISTRATION MANUAL, but are also summarized in Table 4.

*Table 4. Unallowable Supports.*

Unallowable Practices
Repeating the item after the student has selected a response. This is considered prompting, in order to influence the student to choose a different response
Using physical prompts or hand-over-hand guidance
Reducing the number of response option or giving content hints
Using symbols or pictures to represent response options that appear as text in the testlet

Unallowable Practices
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 the DLM alternate assessment 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 of how accessibility supports and allowable practices apply to students who do not enter their own responses with a standard mouse and keyboard.

*Table 5 Allowable Practices and Accessibility Supports for Students with Individualized Student-Response Modes*

Examples	Use of Supports and Allowable Practices
Example #1: The student, who uses eye gaze, receives a computer-delivered testlet. The test administrator puts the responses on flashcards and spaces them further apart than the computer provides so the test administrator can accurately capture the student response.	Test administrators can write onscreen response options as-is on cards to place on an eye-gaze display. The responses must 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 test administrator can deliver this assessment. The student has not learned braille, so that support was not chosen on the Access Profile. The test administrator didn't preview the testlet. When the test administrator administers the first item, she does not know what to do.	The test administrator should change supports in the Access Profile to allow for BVI before submitting responses in the current testlet. The test administrator needs to pause and look at the TIP and use human read aloud. The test administrator would then enter the student's responses for the current testlets in KITE Client.

Examples	Use of Supports and Allowable Practices
<p>Example #3: The student usually accesses text with pictures. During instruction, the educator provides supplemental pictures as necessary, specifically for the response options, so the student can access the text. But that practice is not allowed during DLM assessments.</p>	<p>The focus of most reading EEs is on the ability to make meaning from words. The test administrator or KITE Client can read the text aloud to the student (select human read aloud or synthetic spoken audio in the Access Profile), but test administrators cannot use picture symbols to support word reading. Test administrators may not substitute pictures for words or pair pictures with words that appear as response options. Many ELA response options include adjectives or verbs that are not easily standardized to an alternate communication symbol system.</p>
<p>Example #4: The student has a physical disability that results in limited mobility. The testlet requires the student to manipulate materials.</p>	<p>A student with limited mobility may use their current mode of communication to indicate direction to the test administrator to select responses and/or manipulate materials on behalf of the student. The test administrator may also use partner-assisted scanning and select this in the student's Access Profile.</p>
<p>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 items.</p>	<p>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 test administrator may navigate and enter the responses the student has demonstrated outside KITE Client.</p>
<p>Example #6: The student uses graphic organizers, manipulatives, or other tools to complete academic work.</p>	<p>The test administrator may use the equipment and materials the student is familiar with. The student should still interact with the content on the screen, but the test administrator may navigate and enter the responses the student has demonstrated outside KITE Client. See the Testlet Information Page for each testlet to see specific approved or not approved manipulatives.</p>

Test administrators should use the general principles above and specific examples of allowable and unallowable supports when planning assessment sessions for a student who needs additional supports. If supports are provided that are not listed in this guide, test administrators may be asked to describe these supports, as determined by state policy. More information about supports may be provided by state. Test administrators can consult their states for more information.

### *TESTLET INFORMATION PAGES AND ACCESSIBILITY*

Testlet Information Pages 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 Access Profile 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. Test administrators review the TIP before beginning the student's assessment. More information about the TIP, including how to access a TIP and the content of a TIP is provided in the EDUCATOR PORTAL USER MANUAL and TEST ADMINISTRATION MANUAL.

## STEP 4: SELECT AND VIEW SUPPORTS IN THE KITE SYSTEM

### *DEMONSTRATION OF ACCESS PROFILE SUPPORTS: WHAT STUDENTS WILL SEE*

This section provides more information, including screenshots, about some of the Access Profile accessibility supports described in Step 2 of the customization process. The supports described in this section include magnification, overlay color, invert color choice, color contrast, switch use, and spoken audio. In addition, test administrators are able to explore and manipulate the KITE Client supports online through released testlets and practice using the supports with students. Providing ample time for each student to use the supports in the released 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.

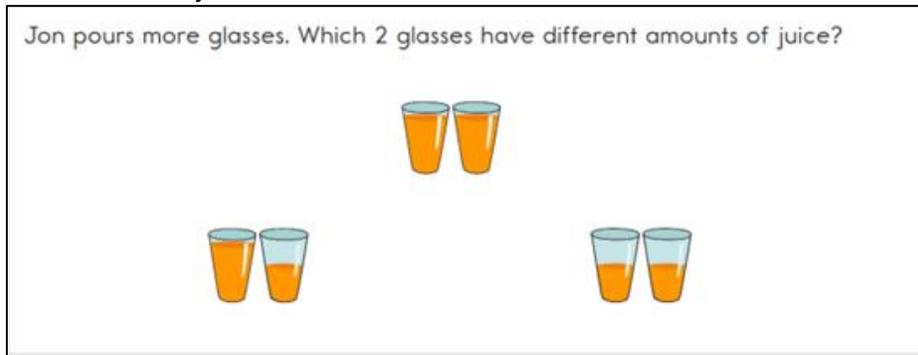


Figure 8. 2x Magnification.

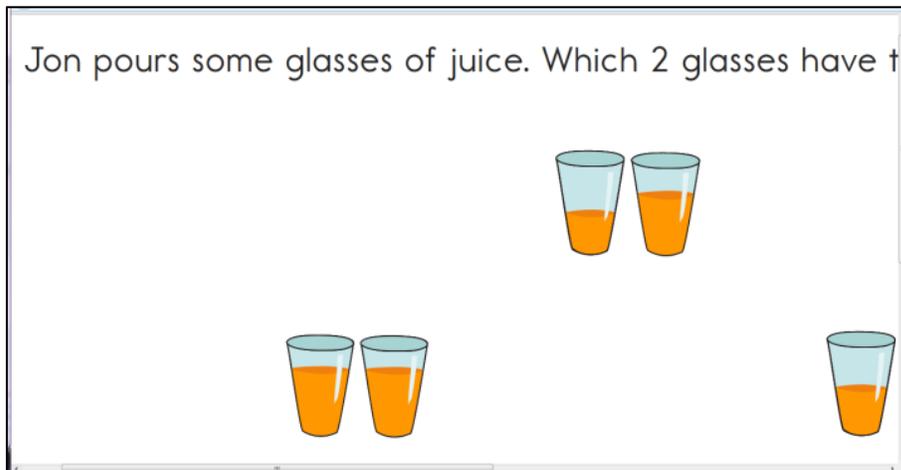


Figure 9. 5x Magnification. (Users must scroll more because the size of the content exceeds the viewing area.)

### Overlay Color

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

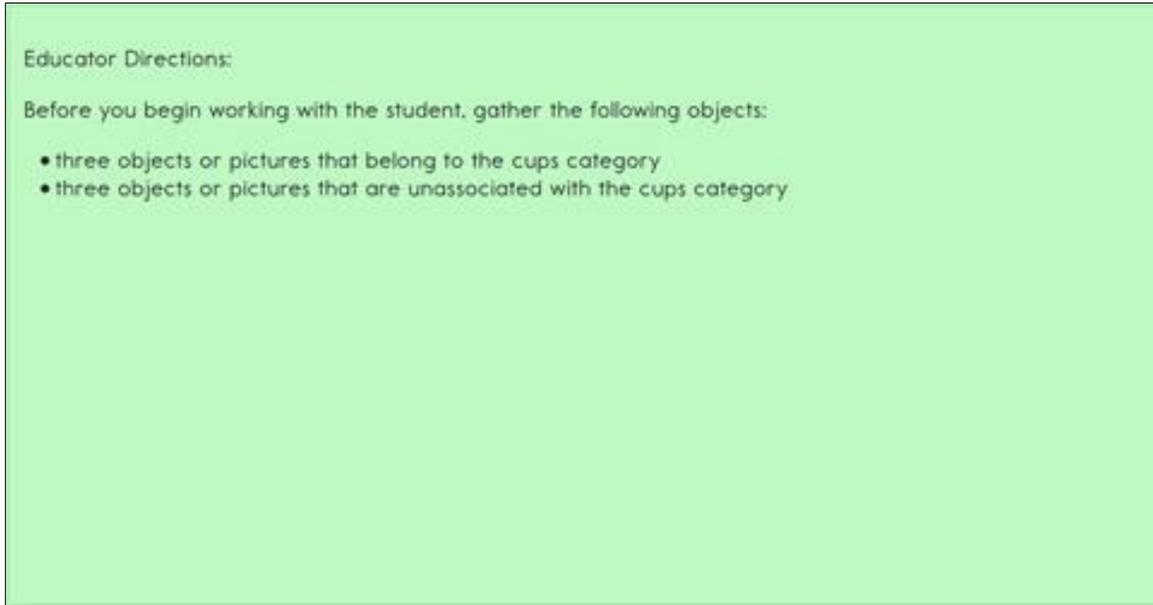


Figure 10. Overlay color in green.

### Invert Color Choice

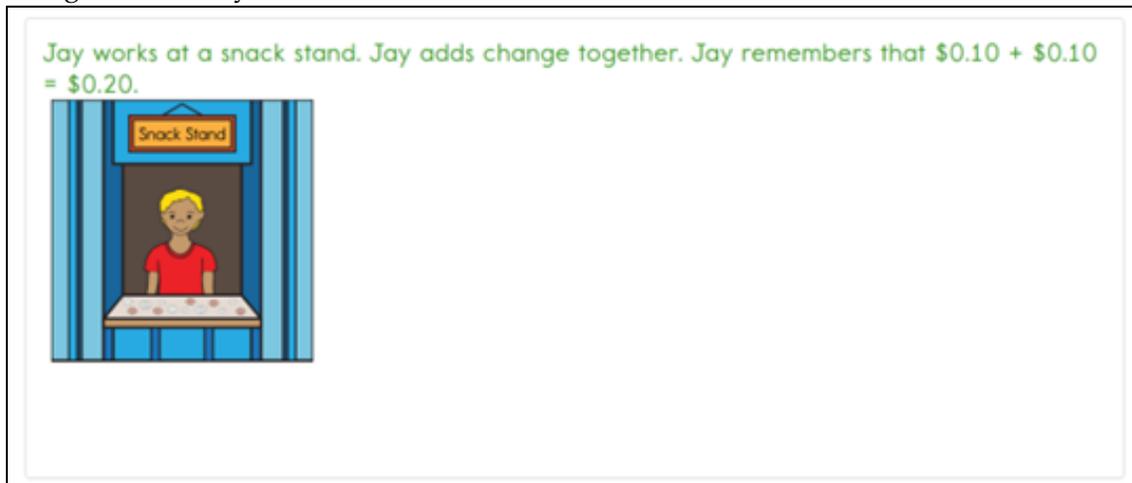
The standard presentation in testlets is a white background with black font. When Invert Color Choice is selected, the background is black and the font is white.



Figure 11. Invert color choice and 4x magnification.

### *Color Contrast*

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



*Figure 12. 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 KITE Client. 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 KITE Client.

Table 6 Switch Use by Item Type

Item Type	Single-Switch System	Two-Switch System
Multiple choice text or pictures as response options	<ol style="list-style-type: none"> <li>1. KITE Client will scan through each response option and navigation button on the page.</li> <li>2. The Access 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. The student uses the switch set to emulate the Tab key to move from one item to the next. KITE Client highlights each response option and navigation button as the Tab key switch is activated.</li> <li>2. The student uses the switch set to emulate the Enter key to select an option when highlighted to indicate the desired response.</li> </ol>
Sorting: The student takes items from the left side of the screen and moves them into groups on the right.	<ol style="list-style-type: none"> <li>1. KITE Client will scan through each drop zone and navigation button based on switch settings selected in the Access Profile.</li> <li>2. When a drop zone is selected, KITE Client 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.</li> </ol>	<ol style="list-style-type: none"> <li>3. The student uses the switch set to emulate the Tab key to move from one drop zone to the next.</li> <li>4. The student selects a drop zone when highlighted using the switch set to emulate the Enter key.</li> <li>5. Once a drop zone is selected, the student uses the switch set to emulate the Tab key to move through items in the drop zone from top to bottom.</li> <li>6. The student uses the switch set to emulate the Enter key to select an individual item when highlighted.</li> <li>7. The item remains highlighted as the student resumes use of the Tab and Enter key switches to select the target drop zone.</li> </ol>
Matching: The student identifies items in two lists that match.	<ol style="list-style-type: none"> <li>1. KITE Client 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 Access Profile.</li> </ol>	<ol style="list-style-type: none"> <li>6. The student uses the switch set to emulate the Tab key to move from the set of items on the left, to the set on the right, then to the navigation buttons.</li> <li>7. The student uses the switch set</li> </ol>

Item Type	Single-Switch System	Two-Switch System
	<ol style="list-style-type: none"> <li>2. The student uses the switch to first select a set of items.</li> <li>3. Then the items within the set are scanned from top to bottom.</li> <li>4. The student uses the switch to select the individual item.</li> <li>5. The item remains highlighted as the student repeats the scan cycle to select the matching item from the set on the other side.</li> </ol>	<ol style="list-style-type: none"> <li>to emulate the Enter key to select a list when highlighted.</li> <li>8. Once a list is selected, the student uses the switch set to emulate the Tab key to move through items in the list from top to bottom.</li> <li>9. The student uses the switch set to emulate the Enter key to select an individual item when highlighted.</li> <li>10. The item remains highlighted as the student resumes use of the Tab and the Enter key switches to select the matching item on the other side.</li> </ol>
Notes	<ol style="list-style-type: none"> <li>1. When manual override is selected, scanning stops when an item/object is selected.</li> <li>2. The student reinitiates scanning by hitting the switch.</li> <li>3. When scanning is reinitiated, KITE Client restarts from the beginning of the cycle.</li> </ol>	<p>After selecting an item/object, selecting the Tab key restarts the cycle over from the beginning.</p>

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

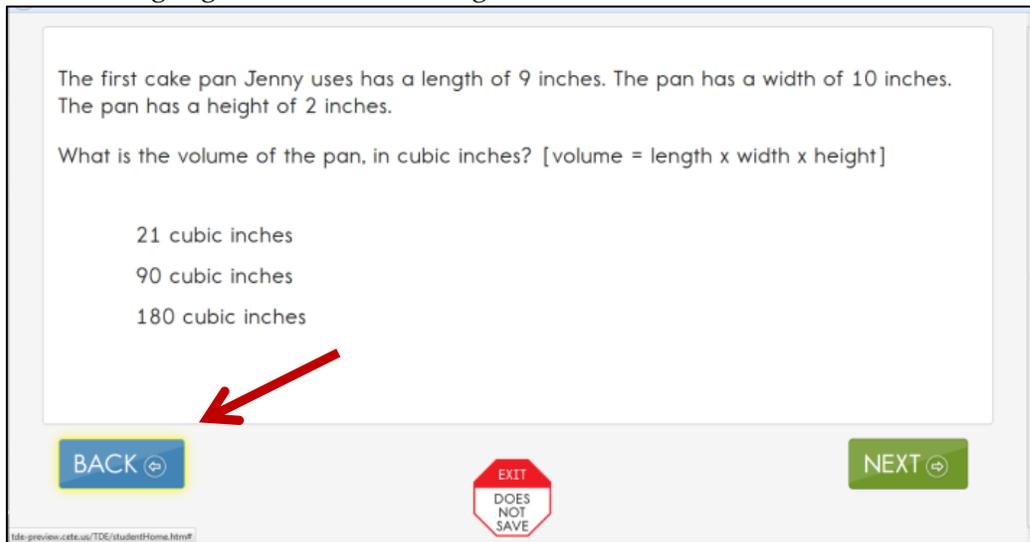


Figure 13. Single-switch and two switch example.

As shown in the following screenshot, the response options are also highlighted.

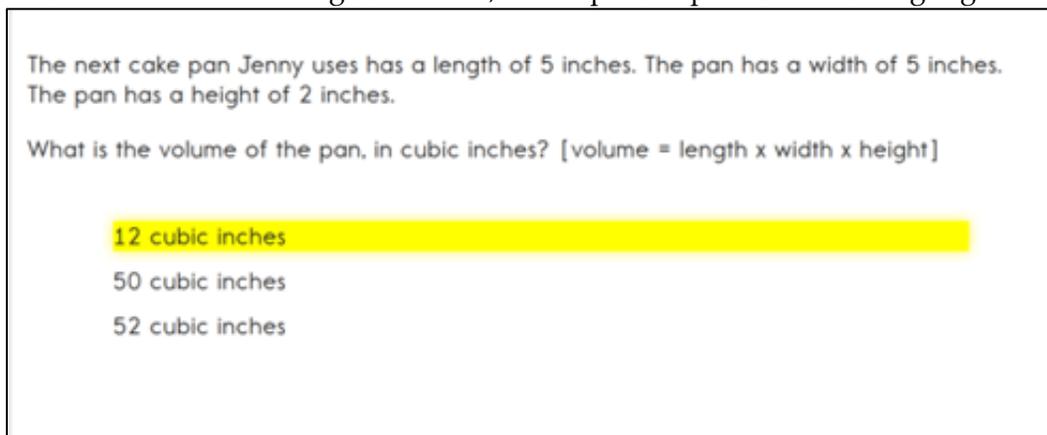


Figure 14. Single-switch and two switch example.

### 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 onscreen text. The nonvisual option is intended for students who are blind or have visual impairments 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.

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

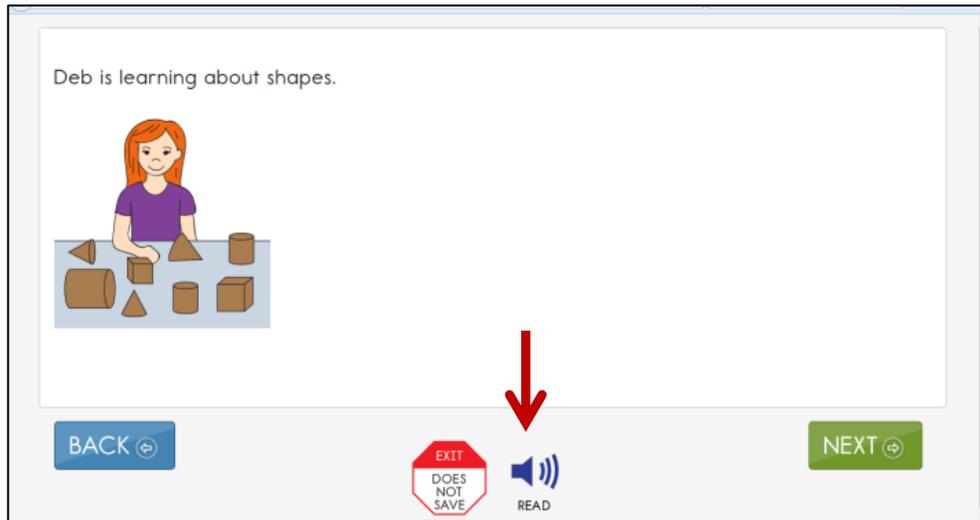


Figure 15. Spoken audio icon.

After clicking the **READ** button, 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 Access Profile: text and graphics, text only, or nonvisual.

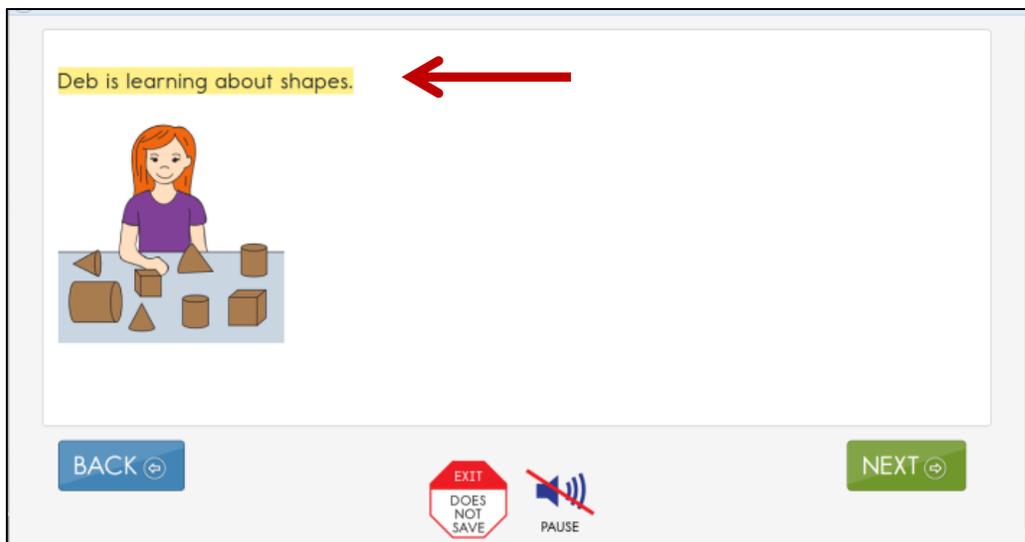


Figure 16. KITE Client highlights the screen during spoken audio reading.

## **STEP 5: PREPARE FOR THE ASSESSMENT – USING THE CHOSEN ACCESSIBILITY SUPPORTS**

In addition to items listed in the TIP, test administrators may need the following:

- ♦ assistive devices appropriate to the student (e.g., switches)
- ♦ 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 teacher-administered and computer-delivered testlets is available in the TEST ADMINISTRATION MANUAL and the ASSESSMENT COORDINATOR MANUAL.

### ***ACCESSIBILITY STRATEGIES***

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

In addition, the DLM Alternate Assessment Consortium 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>). These modules provide information and strategies to help educators instruct students based on the content tested in KITE Client.

## **STEP 6: EVALUATE THE ACCESSIBILITY SUPPORTS USED AFTER ASSESSMENTS**

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

### *QUESTIONS TO GUIDE EVALUATION AT THE STUDENT LEVEL*

This section addresses supports both in and outside of the KITE system.

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

---

## 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](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>

---

## DLM APPENDIX

---

### GLOSSARY

<b>Access Profile (AP)</b>	Student-specific information that tells KITE Client about individual users' needs. The Access Profile includes information KITE Client needs to make the student's user interface compatible with his or her accessibility needs. In KITE Client, the Access 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.
<b>display enhancements</b>	Options to change the way the testlet appears on the screen, including magnification, color overlay, inverted color choice, and contrast color.
<b>engagement activity</b>	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 first reading of the text often serves as the engagement activity. In math, the engagement activity provides context for the items.
<b>Essential Elements (EEs)</b>	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 grade-level standards to academic expectations for students with the most significant cognitive disabilities.
<b>First Contact (FC) survey</b>	A survey used to collect background information about students who are eligible for the DLM alternate 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.
<b>KITE Client</b>	The KITE assessment platform delivers assessments to students through the use of a customized, secure web browser accessible on multiple devices. All students taking the DLM alternate assessment will have accounts in KITE Client. See the TEST ADMINISTRATION MANUAL for more information about KITE Client.

<b>linkage level</b>	A small section of the DLM map that contains one or more nodes that represent critical concepts or skills needed to learn the Essential Element. There are five linkage levels: Initial Precursor, Distal Precursor, Proximal Precursor, Target, and Successor. Linkage levels are always related directly to grade-level Essential Elements (EEs), but extend back to foundational skills at the Initial Precursor level. The nodes at the Target level are most closely related to the expectation in the grade-level EE.
<b>node</b>	Individual skills and understandings that were identified in the research in mathematics and English language arts.
<b>technology-enhanced items</b>	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.
<b>testlet</b>	Short for instructionally-relevant testlet. A testlet includes an engagement activity and a set of three to nine 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 assessment item. Thus, testlets are more reliable and are valid indicators of a student's performance.

## OTHER SUPPORTS

The following table describes options available on the **Other Supports** tab in the Access Profile in Educator Portal.

Table 7. Other Supports.

Other Support	Definition
<b>Supports Provided by Alternate Form</b>	
<b>Alternate Form– Visual Impairment</b>	Most testlets are designed for all students taking the DLM alternate assessments. For a limited number of EEs and levels, alternate forms are provided for students with visual impairments. These testlets are teacher-administered (not braille) and are available for a limited number of EEs and levels. When alternate forms are available, selecting this option will direct KITE Client to deliver that form.
<b>Supports Requiring Additional Tools</b>	
<b>Two-Switch System</b>	Two-switch scanning does not require any activation in the Access Profile. KITE Client automatically supports two-switch step scanning with a switch interface where one switch is set up to emulate the Tab key to move between choices and the other switch is set up to emulate the Enter key to select the choice when highlighted.
<b>Individualized Manipulatives</b>	Test administrators may use manipulatives that are familiar to students (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters, etc.).
<b>Calculator</b>	Test administrators may use a calculator unless the TIP indicates a calculator may not be used.
<b>Supports Provided by the Test Administrator Outside of KITE Client</b>	
<b>Human Read Aloud</b>	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.
<b>Sign Interpretation</b>	For students whose primary mode of receptive communication is sign language, 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.
<b>Language Translation</b>	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. The KITE system does

Other Support	Definition
	not provide language translations.
<b>Masking</b>	Masking is not an option in KITE Client, however it is an acceptable support for students with visual impairments. Test administrators can use a piece of paper to cover portions of the screen to reduce visual clutter without otherwise decreasing the information or number of response options.
<b>Test-Administrator Entering of Responses for Student</b>	If students are unable to select their response options themselves, they may indicate their selected responses through normal response types and/or forms of communication, such as eye gaze or gesture, and then 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 KITE Client.
<b>Partner-Assisted Scanning (PAS)</b>	PAS is a strategy where test administrators assist students with scanning or going through students' response options. Students make indications when their desired responses are presented.

## APPENDIX A: RELEVANT FEDERAL LEGISLATION

### *No Child Left Behind Act of 2001*

The No Child Left Behind Act of 2001 (NCLB). Demands stronger accountability for results. 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—is 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 the most cognitive 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).

### *Every Student Succeeds Act of 2015*

The Every Student Succeeds Act (ESSA) replaces the No Child Left Behind Act of 2001. The ESSA removes federally mandated interventions and instead assigns accountability at the state level. ESSA continues to require fair assessments for students with the most cognitive disabilities. States will do the following:

...provide for the participation in assessments of all students; the appropriate accommodations, such as interoperability with, and ability to use, assistive technology, for children with disabilities (as defined in section 602(3) of the Individuals with Disabilities Education Act (20 U.S.C. 1401(3))), including students with the most significant cognitive disabilities, and students with a disability who are provided accommodations under an Act other than the Individuals with Disabilities Education Act (20 U.S.C. 1400 et seq.), necessary to measure the academic achievement of such children relative to the challenging State academic standards or alternate academic achievement standards described in paragraph (1)(E). [Sec. 1111 2 B vii I II].

## APPENDIX B: 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 Support	Support Provided Within KITE Client via the Access Profile	Support Requires Additional Tools/Materials	Support Provided by the Test Administrator Outside of KITE Client	Support Selected for STUDENT NAME	Notes and Evaluation
Category 1					
<b>Magnification</b>	X				
<b>Invert Color Choice</b>	X				
<b>Color Contrast</b>	X				
<b>Overlay Color</b>	X				
<b>Spoken Audio</b>					
• <b>Text Only</b>	X				
• <b>Text &amp; Graphics</b>	X				
• <b>Nonvisual</b>	X				
Category 2					
<b>Uncontracted Braille</b>		X			
<b>Single-Switch System (Access Profile Enabled)</b>		X			
<b>Two-Switch System</b>		X			

<b>Accessibility Support</b>	<b>Support Provided Within KITE Client via the Access Profile</b>	<b>Support Requires Additional Tools/Materials</b>	<b>Support Provided by the Test Administrator Outside of KITE Client</b>	<b>Support Selected for STUDENT NAME</b>	<b>Notes and Evaluation</b>
<b>Individualized Manipulatives</b>		X			
<b>Calculator</b>		See TIP			
<b>Alternate Form– Visual Impairment</b>		X			
<b>Category 3</b>					
<b>Human Read Aloud</b>			X		
<b>Sign Interpretation of Text</b>			X		
<b>Language Translation of Text</b>			X		
<b>Test-Administrator Entering of Responses for Student</b>			X		
<b>Partner-Assisted Scanning</b>			X		

## DOCUMENT HISTORY

---

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

---

<b>Date</b>	<b>Section Name/ Summary of Changes</b>	<b>Starting Page</b>