

DYNAMIC[®]
LEARNING MAPS

ACCESSIBILITY MANUAL 2021–2022

SCIENCE

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Version Science

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 publication date will also be updated. A summary of changes is included in the Appendix under Document History.

Dynamic Learning Maps® Consortium. (2021). *Accessibility manual for the Dynamic Learning Maps® alternate assessment, 2021–2022*. Lawrence, KS.

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 everyone’s time and efforts to improve this document.

FINDING HELP

When the information in this manual and resources from your state Dynamic Learning Maps® (DLM®) webpage do not lead to solutions, these contacts can provide additional support (Table 1).

HINT: Print this page and keep it handy!

Table 1

Additional Supports for Users

Local Technology Representative	State Education Agency	The DLM Service Desk* 1-855-277-9751 (toll-free) or DLM-support@ku.edu
Kite® Student Portal installation General computer support Internet availability Display resolution Issues with sound, headphones, speakers, etc.	How to use Student Portal and Educator Portal Training requirements Assessment questions Assessment scheduling Test invalidation requirements Student Individualized Education Program (IEP) requirements Test window dates, extensions, requirements, etc. Testlet resets (may take up to 72 hours)	Data issues (rosters, enrollment, etc.)

WHEN CONTACTING THE DLM SERVICE DESK

- **Do not send any Personally Identifiable Information (PII)** for a student via email or Live Chat in Educator Portal. 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 or sent via Live Chat in your state.
- **Do send**
 - your contact information, including email address and name
 - your school name, including district if contacting state-level personnel
 - error messages, including testlet number if applicable to the problem

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OVERVIEW

AUDIENCE AND PURPOSE

The ACCESSIBILITY MANUAL for the Dynamic Learning Maps® (DLM®) alternate assessment provides guidance to state leaders, district staff, test administrators, and IEP teams in the selection and use of the accessibility supports available in the DLM Alternate Assessment System.

ADDITIONAL RESOURCES

Additional procedural information on braille testlets, language translation, and sign language is provided in the TEST ADMINISTRATION MANUAL and the EDUCATOR PORTAL USER GUIDE, which are available on the DLM website at <http://dynamiclearningmaps.org>.

For instructions on using Kite® Educator Portal to select the appropriate supports for each student, access the EDUCATOR PORTAL USER GUIDE.

WHAT'S NEW IN THIS VERSION

Information about these topics has been added or enhanced in this version (Table 2).

Table 2

Changes in this Version of the Manual

Topic	Starting Page
Added Live Chat to the options for contacting the service desk	3
The addition of a scenario to the Accessibility Issue/Solution chart	25
Edits to text throughout the manual	Throughout

To learn about updates to test administration resources such as this manual, subscribe to [Test Updates](#) on the DLM website.

ABOUT THE DYNAMIC LEARNING MAPS ALTERNATE ASSESSMENT SYSTEM

The DLM Alternate Assessment System assesses what students with the most significant cognitive disabilities know and can do in the DLM-assessed subjects in Grades 3–8 and high school. The department of education in each state determines which subjects and grades to assess. The DLM Alternate Assessment System provides accessibility by design and is guided by the core beliefs that all students are to have access to challenging, grade-level content and that test administrators must adhere to the highest levels of integrity in providing instruction and administering assessments based on this challenging content.

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

Understanding how the DLM alternate assessment is designed for accessibility and how accessibility supports can be customized helps test administrators determine which supports are needed for each student.

ACCESSIBILITY BY DESIGN

ACCESSIBLE CONTENT

Accessible content is essential to student success. Member states and staff of the Dynamic Learning Maps® (DLM®) Alternate Assessment Consortium worked together to develop testlets at various complexity levels by creating item-writing guidelines based on Universal Design for Learning and by using an appropriate vocabulary level.

Universal Design for Learning is a scientifically valid framework for guiding educational 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, 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, 2008). Universal Design for Learning is a framework that is critical to understanding how students with the most significant cognitive disabilities can achieve success within content standards. Universal Design for Learning is enriched and enhanced by using technology.

The technology that is used for administration of the DLM alternate assessment is a special user interface called the Kite® Suite. The suite is comprised of a portal for educators called Educator Portal and a portal where students are assessed called Student Portal. In Student Portal, students are administered grade-level assessments that have an appropriate balance of academic challenge and accessibility to the content. This balance is determined from information provided by the test administrator using a collection tool in Educator Portal called the First Contact survey.

The information that is collected using the First Contact survey goes beyond basic demographic information and includes questions on topics such as communication, assistive technology devices, motor and sensory impairments, and academic performance. The test administrator responds to items in the survey about these topics for each student to whom they are rostered in Educator Portal. Some items from the First Contact survey are used to determine a student's entry point, or initialization, into the assessment. The entry point is the student's first testlet.

Testlets allow flexibility in the content complexity level based on the needs of each student. A testlet in the DLM alternate assessment is a grouping of three to five items, and they are built to show the relationships between the knowledge and skills necessary to learn the information in the DLM standards called the Essential Elements.

Essential Elements are specific statements of knowledge and skills that are linked to each state's general education science standards. Each testlet assesses one Essential Element. The tested Essential Elements for science, called the blueprint, are listed on each state's DLM webpage.

The tested Essential Elements are described in grade-band performance expectations by the end of each grade band:

- grade 5 for the 3–5 elementary grade band
- grade 8 for the 6–8 middle school grade band
- grade 11 for the 9–11 high school grade band

Each science Essential Element has three complexity bands called linkage levels. These describe where a student’s performance is in relationship to the grade-level target. The linkage levels are called the Initial, the Precursor, and the Target. The Target linkage level is the highest linkage level at this time and is written at the level of the Essential Element. The Precursor and Initial linkage levels are lower in depth, breadth, and complexity than the Target linkage level.

The Initial linkage level is the least complex level. Testlets developed at the Initial linkage level often reflect foundational aspects of the content standards, which include skills and understandings necessary for learning subsequent academic content (e.g., “focus attention”). Testlets at the Initial linkage level are typically intended for students who do not yet have symbolic communication. These testlets are administered by the test administrator who observes the student’s behavior, as directed by the instructions within the testlet, and then records their observations of the student or the student’s responses in Student Portal.

The Precursor linkage level is between the Initial linkage level and the Target linkage level. The Precursor linkage level identifies significant milestones en route to the knowledge and skills described by the Essential Element, indicating a student’s performance relative to the grade-level standards. Information gathered in the First Contact survey along with ongoing student performance is used by the Kite system to determine the accessibility and appropriateness of a linkage level for each student.

TESTLET DESIGN—THE ENGAGEMENT ACTIVITY

All science testlets have an engagement activity. Science testlets begin with an engagement activity that can be one of four types:

- The first type of engagement activity is simply a single screen with one or two pictures along with a short sentence that introduces the science topic to be assessed. The items in this testlet will not assess the engagement screen itself but will assess the Essential Element topic.
- A second type of engagement activity describes a scenario which taps prior knowledge or experience, introduces the concept to be addressed, and provides context for the items. The items in this testlet type will assess information in the engagement activity and in the Essential Element topic.
- A third type of engagement activity 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 or at the end of the second presentation. The items in this testlet type will assess information in the engagement activity and in the Essential Element topic.

- The last type is a short silent video (up to 30 seconds) and is only found in the upper grade bands and the upper linkage levels. Students will access the short video and then respond to three items that include still-frame photos from the video. The entire video clip is completely soundless. However, even without audio, the video player displays the speaker icon and volume setting on the video, so it appears as if the option to change the volume of the audio is available.

NUMBER OF TESTLETS DELIVERED

Students are required to take nine science testlets during the spring assessment window. In states administering biology in high school, students take an end-of-instruction biology assessment for a total of 10 testlets. Each testlet assesses only one Essential Element at the appropriate linkage level. Since every testlet is packaged and delivered separately, the test administrator can determine when to schedule the administration of each testlet within the state assessment window.

When the required spring assessment window opens, the first testlet that is delivered is based on the information provided in the First Contact survey by the student's teacher. The testlets following the first one are adaptive. After a student submits the first testlet, the second testlet becomes available in about 15 minutes, and its linkage level is based on the student's performance on the first testlet. The remaining testlets continue to be based on student performance on the preceding testlet with each one becoming available after about 15 minutes from the time the preceding testlet is submitted. The system determines whether the next testlet should be delivered at the same linkage level, a higher level, or a lower level.

NOTE: The optional instructionally embedded assessment window is available in the fall and winter months. Learn about this assessment opportunity in the [TEST ADMINISTRATION MANUAL](#) and the [EDUCATOR PORTAL USER GUIDE](#).

TESTLET ITEM DESIGN

Testlets are in two general formats: computer-delivered or teacher-administered, based on the information the test administrator recorded in the First Contact survey. Most testlets are designed for direct student interaction via the computer, and all science items are in a single-select multiple-choice format. The student can use special devices such as alternate keyboards, touch screens, or switches. Many students can interact with the computer independently. However, in some instances, the student may need support from the test administrator. Screenshots of item types in computer-delivered testlets are shown in Figure 1 and Figure 2.

ITEM TYPES

Figure 1. A screenshot of single-select multiple-choice item with text as response options.

Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

goes up

goes down


stays the same

Some testlets are designed so test administrators can administer them outside of Student Portal, with step-by-step guidance provided in the testlet (Figure 2). For these testlets, the test administrator, rather than the student, records student testlet responses in Student Portal.


Figure 2. A screenshot of a teacher-administered item in which the test administrator interacts directly with the student and, on the student's behalf, enters the student's response into the testlet in Student Portal.

Record student response:

☐ Indicates melting stick of butter:



☐ Indicates solid stick of butter:



☐ Indicates both pictures

☐ Indicates or attends to other stimuli

☐ No response

CUSTOMIZATION FOR EACH STUDENT

The assessments are designed to be customized for each student from information provided by the test administrator in the Personal Needs and Preferences (PNP) Profile and the First Contact survey. Once the test administrator submits the First Contact survey information, the system analyzes the data using a complex algorithm to determine the best level of complexity, or linkage level, for the student's first testlet. The system uses the PNP Profile settings chosen by the test administrator to customize each student's assessment experience. The test administrator determines which accessibility supports to include (e.g., magnification), and which assessment form to deliver in Student Portal (e.g., braille). The supports in the PNP Profile are listed under five tabs: Summary, Display Enhancements, Language & Braille, Audio & Environment Support, and Other Supports.

After the available and appropriate supports are selected and saved, the test administrator may check the Summary tab to review the current profile settings (Figure 3). More information about the PNP Profile settings available for selection in each tab will be described later in this manual.

Figure 3. Screenshot of accessibility Summary tab. Data are for a fictional student.

The screenshot displays the 'Summary' tab of the accessibility settings for a student named Patricia Lane. The interface includes a header with the student's name and a close button. Below the header are five tabs: Summary, Display Enhancements, Language & Braille, Audio & Environment Support, and Other Supports. The 'Summary' tab is selected and highlighted with a red box. It contains two main sections: 'Student Demographics' and 'Current Profile Settings'. The 'Student Demographics' section lists the student's first name (Patricia), middle name (-), last name (Lane), state ID (6598745823), grade (Grade 5), gender (Female), and date of birth (03/07/2010). The 'Current Profile Settings' section is highlighted with a red box and contains a list of settings: Magnification (2x), Braille Grade (Uncontracted), Number Of Braille Dots (6), Number Of Braille Cells (80), Braille Mark, Braille Dot Pressure (0.5), Braille Status Cell (Off), and Braille File Type (UEB). An 'Edit Settings' button is located to the right of the 'Current Profile Settings' section.

Section	Field	Value
Student Demographics	FIRST NAME:	Patricia
	MIDDLE NAME:	-
	LAST NAME:	Lane
	STATE ID:	6598745823
	GRADE:	Grade 5
	GENDER:	Female
	DATE OF BIRTH:	03/07/2010
Current Profile Settings	Magnification	Magnification : 2x
	Braille	Braille Grade : Uncontracted
		Number Of Braille Dots : 6
		Number Of Braille Cells : 80
		Braille Mark :
		Braille Dot Pressure : 0.5
		Braille Status Cell : Off
		Braille File Type : UEB

Since the PNP Profile settings in Educator Portal activate the appropriate system accessibility supports, best practice is for test administrators to complete the PNP Profile before the assessment begins. When necessary, the test administrator can adjust the PNP Profile settings if they are not working well for the student or if the student's needs changed during an assessment window or even in the middle of a testlet.

CHANGING PNP PROFILE SETTINGS DURING TESTING

To change a PNP Profile setting during testing, follow this process:

1. The test administrator exits the testlet by using the **Exit Does Not Save** button.

NOTE: If the use of **Exit Does Not Save** is not allowed in your state, submit the current testlet, and then make any necessary changes in PNP Profile immediately—before the next testlet is delivered.

2. The test administrator logs in to Educator Portal, goes to **Settings** and **View Students**, selects the PNP Profile for the student, and selects or deselects the desired support settings.
3. The test administrator **must save** the new selection(s) in the PNP Profile before exiting.
4. Table 3 outlines how long each accessibility support will take to appear in the testlet after being updated in the PNP Profile.

Table 3

Accessibility Support Delay Time after Updating the Student's PNP Profile

Support	How Soon the Change Appears in the Testlet
Magnification	Immediately
Overlay color	Immediately
Invert color choice	Immediately
Contrast color	Immediately
Spoken Audio	Overnight
Braille (UEB, EBAE, Nemeth Code)	Overnight if available for the Essential Element at the linkage level being tested
Alternate form-visual impairment	Overnight if available for the Essential Element at the linkage level being tested
Single-switch system	Overnight
Two-switch system	Immediately
Individualized manipulatives	Immediately
Calculator	Immediately

HINT: Braille testlets and Alternate Form-Visual Impairment testlets are only available during the spring assessment window, only at the Target level, and only for some Essential Elements. However, standard forms of testlets are always available for every Essential Element at all three linkage levels. Therefore, if either a braille or an Alternate Form-Visual Impairment form was selected in the PNP Profile but is unavailable for the Essential Element at the linkage level being tested, the testlet delivered will be a standard form. The test administrator is responsible for making the information accessible to the student using the methods that have been used during normal classroom instruction.

SUBMITTING THE FIRST CONTACT SURVEY

The data collected in the First Contact survey determines the student's beginning placement into the assessment, in other words, the best linkage level to deliver in the first testlet when the spring assessment window opens.

If the First Contact survey is submitted before the state's assessment window opens, the first testlet will be ready and available on the opening day of the window. If the First Contact survey is submitted after the opening of the window, the first testlet will not be available until the next day.

Instructions for how to complete the First Contact survey are in the EDUCATOR PORTAL USER GUIDE. Additionally, the helplet video [Personal Learning Profile Training](#) describes how to find and complete the First Contact survey and Personal Needs and Preferences (PNP) Profile.

SIX STEPS TO CUSTOMIZE DYNAMIC LEARNING MAPS ACCESSIBILITY SUPPORTS FOR STUDENTS

This section presents a six-step process for IEP teams, general and special education teachers, test administrators, and district-level assessment staff to use in the selection, administration, and evaluation of accessibility supports used in Student Portal 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: Select and View Supports in the Educator Portal
- ☐ Step 5: Prepare for the Assessment: Using the Chosen Accessibility Supports
- ☐ Step 6: Evaluate the Accessibility Supports Used at the End of the Assessment Window, After All Testlets Have Been Administered

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

STEP 1: INCLUDE ELIGIBLE STUDENTS IN THE DLM ALTERNATE ASSESSMENT

PARTICIPATION IN A STATE ASSESSMENT

Legislation focused on accountability and inclusion of all students for assessment has driven the need 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, Ysseldyke, & Elliott, 1997). Several important laws require students with the most significant cognitive disabilities to participate in standards-based instruction and assessment initiatives. These include federal laws such as No Child Left Behind of 2001, the Individuals with Disabilities Education Improvement Act of 2004 (IDEA), and the Every Student Succeeds Act, which went into effect in 2015.

PARTICIPATION GUIDELINES

Students with the most significant cognitive disabilities have one or more disabilities that significantly affect intellectual functioning and adaptive behavior. Adaptive behavior is behavior that is essential to live independently and function safely in daily life. The Dynamic Learning Maps® (DLM®) alternate assessment is designed for students with the most significant cognitive disabilities who require significant instruction and support both in and out of the classroom.

The DLM alternate assessment provides three general participation criteria and **all three** must be met:

1. The student has a significant cognitive disability. Review of student records indicates one or more disabilities that significantly affect intellectual functioning and adaptive behavior.
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 Essential Elements and address the knowledge and skills that are appropriate and challenging for this student.
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 temporary or transient, 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 considerations are neither allowable nor acceptable for determining participation in the DLM alternate assessment:

- a disability category or label
- poor attendance or extended absences
- native language, social, cultural, or economic difference
- expected poor performance on the general education assessment
- academic and other services the student receives
- educational environment or instructional setting
- percent of time receiving special education
- English learner status
- low reading level or achievement level
- anticipated student's disruptive behavior
- impact of student results on accountability system
- administrator decision
- anticipated emotional duress
- need for supports (e.g., Assistive Technology/Augmentative and Alternative Communication (AAC) to participate in the assessment process

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

STEP 2: LEARN ABOUT THE ACCESSIBILITY SUPPORTS

ACCESSIBILITY SUPPORTS PROVIDED IN THE DLM ALTERNATE ASSESSMENT

This section identifies the accessibility supports available for students taking the DLM alternate assessment and distinguishes between accessibility supports that (a) can be utilized by selecting online supports via the Personal Needs and Preference (PNP) Profile, (b) require additional

supports materials, and (c) are provided by the test administrator outside the Kite® system. Table 4 shows which supports fall under each of these categories. Each support is described in the following section. If the state requires documentation about certain accessibility supports in the student’s IEP, refer to the State Appendix (if provided) for more information, or contact the state department of education.

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.

Prior to administering the DLM alternate assessment, test administrators provide information about the accessibility needs of each assessed student. The Kite system stores this information and uses some of it to activate certain supports.

Table 4

Accessibility Supports of the DLM Alternate Assessment System

Category 1: Settings in the PNP Profile that activate supports within Student Portal	Category 2: Settings in the PNP Profile that activate supports within Student Portal in addition to supports provided by the test administrator outside of Student Portal	Category 3: Settings in the PNP Profile that require supports provided by the test administrator outside of Student Portal
<ul style="list-style-type: none"> • Magnification • Overlay color • Invert color choice • Contrast color • Spoken Audio 	<ul style="list-style-type: none"> • Uncontracted braille (EBAE) for ELA and science • Uncontracted braille (UEB) for ELA and science • Nemeth Code for mathematics • Alternate Form-Visual Impairment • Single-switch system (PNP Profile enabled) • Two-switch system • Individualized manipulatives • Calculator 	<ul style="list-style-type: none"> • Human read aloud • Sign interpretation of text • Language translation of text • Test administrator entering of student responses • Partner-assisted scanning (PAS)

SUPPORT CATEGORIES

Category 1 Settings in the PNP Profile Activate Supports within Student Portal

Online supports include magnification, overlay color, invert color choice, contrast color, and Spoken Audio. Directions detailing how to select the PNP Profile supports are found in Step 4: Select and View Supports in the Kite System on page 31.

Test administrators are advised to try out the supports in advance to make sure they are compatible and provide the best access for students. Access the Guide to Practice Activities and Released Testlets on the [DLM website](#) for more information (e.g., the usernames and passwords for the practice demo testlets). Released testlets are like real testlets. They are selected from a variety of Essential Elements and linkage levels across Grades 3–8 and high school. New released testlets are added periodically.

- **Magnification:** Allows test administrators to choose the degree of screen magnification during assessment. Test administrators can choose between a magnification of 2x, 3x, 4x, or 5x. Without magnification, the font is Report School, 22 point. Scrolling may be required when the level of magnification is increased because the entire item will no longer be visible on the screen. Scrolling will vary according to the level of magnification, the amount of content in the item, and the size of the screen.
- **Overlay color:** The background color of the assessment. The default color is white. Test administrators may select from the alternate colors of blue, green, pink, gray, and yellow. Practice demo testlets have specific presets, but more options are provided in the PNP Profile and actual live testlets.
- **Invert color choice:** Makes the background color black and the font white. Images display with a white background.
- **Contrast color:** Allows test administrators to choose from color schemes for the background and font.
- **Spoken Audio:** Synthetic Spoken Audio (read aloud with highlighting) is read from left to right and top to bottom. Three preferences are available 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).

HINT: When using Spoken Audio, do not choose yellow for overlay color in the PNP Profile. The Spoken Audio feature highlights the text in yellow as the words are spoken. Therefore, overlay color in yellow makes the Spoken Audio highlighting feature hidden to the student.

Screenshots showing these supports begin in the Demonstration of Personal Needs and Preferences Supports: What Students Will Experience section on page 31 of this manual.

Category 2 Settings in the PNP Profile that Activate Supports in Student Portal in Addition to Supports or Materials Provided by the Test Administrator Outside of Student Portal

These supports include braille, switch system preferences, and the use of special supports and materials and typically require prior planning and setup. The test administrator selects these

supports in the PNP Profile. Practice activities and released testlets with supports are available through several demo student accounts. Access the Guide to Practice Activities and Released Testlets or the TEST ADMINISTRATION MANUAL for a list of demo logins for practice testlets.

- **Braille:** The DLM Alternate Assessment System supplies braille forms for some testlets at the Target linkage level in Grades 3–8 and high school during the spring assessment window only. For ELA and science, braille forms are available in either uncontracted Unified English Braille (UEB) or English Braille American Edition (EBAE), depending on the state’s decision. The test administrator selects the appropriate braille form in the student’s PNP Profile.

NOTE: DLM mathematics braille forms are in Nemeth Code.

- The DLM alternate assessment is designed to assess a student’s knowledge, skills, and understandings of the Essential Elements, not the student’s ability to use braille. Braille testlets are for students who read braille proficiently. Braille is not to be selected for emerging braille readers. When braille is appropriate for a student, the DLM Consortium recommends choosing braille and Alternate Form-Visual Impairment supports in the student’s PNP Profile. The following options, such as alternate forms, are also suitable for a student with a visual impairment who does not read braille.
- **Alternate Form-Visual Impairment:** For a student who is blind and does not read braille or a student who has a significant visual impairment, the test administrator selects Alternate Form-Visual Impairment in the PNP Profile under the **Other** tab. The alternate form of the testlet, if available, will have the letters BVI (Blind Visual Impairment) in the testlet name, in the test ticket, and in Student Portal (e.g., SP **BVI** SCI MS.PS1-2 P 10455). If a BVI form is not available for the testlet, the system will deliver a standard form to the student. The accompanying Testlet Information Page (TIP) for that testlet will provide information about how to make appropriate adaptations for the student.
- When a standard testlet for the student is delivered, the test administrator is responsible for making the information accessible to the student using the methods that have been used during normal classroom instruction.
- **Single-switch system:** This support is activated using one switch and a switch interface that emulates the Enter key on the keyboard. In the PNP Profile, test administrators can set the scan speed, indicate if scanning is to begin automatically when the page appears, and select the number of times the scan cycle repeats before stopping.
- **Two-switch system:** This 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:** Students may use familiar manipulatives (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters). Refer to the TIP for constraints for a specific testlet.
- **Calculator:** Students may use a calculator on mathematics testlets unless it interferes with the construct of the testlet. The TIP for each mathematics testlet will specify whether a calculator is permitted.

Category 3 Settings in the PNP Profile Require the Test Administrator to Provide All Supports Outside of Student Portal

Supports offered outside of Student Portal require actions by the test administrator, such as reading, signing, translating the assessment, or helping the student enter responses. These supports are recorded in the PNP Profile even though they are delivered by the test administrator outside of Student Portal.

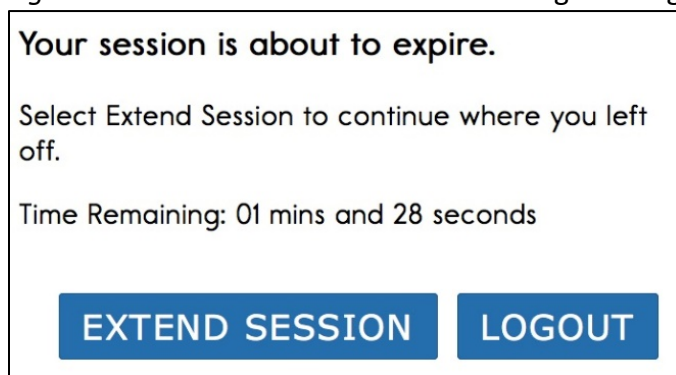
- **Human read aloud:** Test administrators may read the assessment aloud to students. Alternate text for test administrators who will deliver the human read aloud will include descriptions of graphics and alternate text descriptions of images. The descriptions and alternate text are provided as additional pages after the main TIP.
- **Sign interpretation of text:** Test administrators may sign the content to students using American Sign Language (ASL), Signing Exact English, or personalized sign systems.
- **Language translation of text:** Test administrators may translate the text for students who are English learners or who communicate best in a language other than English. Language translations are not provided via the computer. State policy will guide whether translation can be used.
- **Test administrator entering student responses:** If a student is unable to physically input their response options, they may indicate their responses through their typical response mode and form of communication (e.g., eye gaze, gesture, assistive device). Test administrators may key in a student's response in Student Portal only when students are unable to record their responses independently.
- **Partner-assisted scanning (PAS):** PAS is a strategy in which test administrators assist students with scanning students' response options. Test administrators read and point to each response option, and students indicate when they are presented their desired response.

SYSTEM TIMEOUT

The DLM alternate assessments are administered individually and are not timed. Students may take as much time as needed and work in settings that are most appropriate for them. In other words, any flexibility in the assessment time and location that the student needs are permissible. For example, the student may take as many breaks as needed throughout the completion of a testlet. During the administration of a testlet, Student Portal can sit inactive for as long as 90 minutes before timing out.

At 88 minutes and 30 seconds of inactivity in the testlet, the system prompts the student with a warning message (Figure 4).

Figure 4. Kite Student Portal session ending warning.



- If the student does nothing—in other words, if no activity occurs before the countdown reaches 0, the system logs the student out of the testlet and returns to the login screen. The testlet status returns to **Unused**, and the system retains no responses.
- If the student selects **Extend Session**, the system disregards the idle time, closes the prompt, and returns to the screen where the student was working.
- If the student selects **Logout**, the system logs the student out of the testlet and returns to the login screen. The testlet status returns to **Unused**, and the system retains no responses.

TESTLET RESETS AFTER EXTENDED INTERRUPTION

Students with the most significant cognitive disabilities who qualify for the DLM alternate assessments require extensive, repeated, and individualized instruction and ongoing supports that are not temporary or transient in nature, and they have difficulty retaining information in working memory for extended periods of time. Therefore, testlets were created to be short with only a few items, with each testlet beginning with an engagement activity that is designed to activate prior knowledge, motivate the student, and provide a context. While DLM test administration procedures are designed to be flexible and allow students to take breaks during a testlet, most students who experience an extended interruption during test administration have difficulty retaining information in working memory after that extended interruption. Research has shown that extended interruptions during test administration can have adverse effects on student performance (Sinharay et al., 2014). Because of this, Student Portal was designed to time out after an extended period of inactivity without retaining the responses, allowing the student to begin the assessment afresh when ready.

SUPPORTS NOT AVAILABLE IN STUDENT PORTAL

Some supports that are not available in the system include the following:

- **Sign language using human or avatar videos onscreen:** Most eligible students who communicate with sign language use Signed Exact English or personalized sign systems.
- **Tactile graphics:** Objects, tactile graphics, or tactile representations of pictures or objects presented onscreen as a concrete representation may be used. Educators may use individualized tactile representations with their students, as appropriate.

STEP 3: DISCUSS AND SELECT APPROPRIATE ACCESSIBILITY SUPPORTS—CONSIDERATIONS FOR IEP TEAMS

Many computer-based supports can be used for the assessments to make them accessible to each student, such as various font colors or magnification sizes. In a student's PNP Profile, the test administrator may choose from several Student Portal supports available for a DLM testlet. The test administrator is to include supports that are required to meet the student's needs, such as those listed in the student's IEP. Other supports are available for use, even if not required in the student's IEP, such as ones the student may enjoy using (e.g., invert color choice). However, best practice during testing is to provide students with the PNP Profile supports or combination of supports that the student has been using during regular instruction. Unfamiliar supports may be distracting and even detrimental during assessment.

DECIDING WHICH ACCESSIBILITY SUPPORTS ARE NEEDED

The IEP team determines an individual student's needs, and test administrators then select the accessibility supports based on those needs rather than on the disability category, grade level, or instructional setting.

Students with the most significant cognitive disabilities who are also English learners need decisions about their language-related supports to be made by educators who understand them best. This person is typically the test administrator. Once the supports are selected, these students are best served when the accessibility supports are used consistently for both instruction and assessment.

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

- to help a test administrator draw conclusions about a student's ability to use a selected PNP Profile support during assessments
- to make decisions about which PNP Profile supports best fit a student's individual needs and preferences
- to provide students 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 to allow a student to practice using any of the PNP Profile supports as often as needed and to allow test administrators to observe a student's interaction with those supports. Test administrators can change the selections in the PNP Profile, depending on the conclusions drawn about a student's experience with the testlets. Additionally, repeated practice can increase both students' and test administrators' ease on the day the assessment window opens.

Guiding Questions for Discussion and Selection of Appropriate Accessibility Supports

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

- What are the student's learning strengths, and in which areas does the student need improvement?

- How are a student's knowledge and understanding of the Essential Elements impacted by the student's learning needs?
- Which instructional and assessment tasks are difficult for the student to do independently when working one-on-one in the classroom or when interacting in an online environment?
- Which current supports help the student with these difficulties, when working one-on-one in the classroom or when interacting in an online environment? What kinds of instructional strategies (e.g., visual, tactile, auditory, combination) work best for the student?
- Which accessibility supports match these strategies and may help the student access the assessment?
- Which supports or materials does the student prefer?
- What were the results of routine assignments and classroom testing when accessibility supports were used or not used?
- Did the student have any difficulties interacting with these supports in the past? If so, what were the difficulties and how can they be resolved?
- Which accessibility supports will increase the student's access to the assessment by addressing their learning needs and reducing the effect of their disability?
- Which effective combinations of accessibility supports will help the student?

(Thompson, Morse, Sharpe, & Hall, 2005)

Test administrators may also need to amend a student's IEP to include any additional, appropriate supports available in the PNP Profile that were not listed on the IEP, depending on state policy. Check state policy about amending the IEP.

The user interface in Student Portal has been specially designed for students with the most significant cognitive disabilities. However, students may need additional assistance during the assessment to be able to interact with the computer. Testlets delivered directly to students via computer are designed under the assumption that students can interact with the computer independently.

SUPPORTS: ALLOWED AND NOT ALLOWED

The following supports are allowed:

- white boards
- traditional keyboards using word processing software
- adapted keyboards that include all 26 letters of the alphabet
- tablet computer keyboards using word processing software
- alternate keyboard, onscreen switch-enabled keyboard
- alternate pencils, including alphabet flip charts
- eye-gaze displays of letters
- letter-by-letter dictation of any sort
- Pens, pencils, markers, and crayons can be used for the writing product a student produces off the computer for the writing testlets
- word prediction software

Word predication is an intelligent word processing feature that can alleviate writing breakdowns for a range of students simply by reducing the number of keystrokes necessary for typing words, and it removes motor barriers to typing in order to reduce the gap between generating ideas and capturing them in writing.

Test administrators may also help students navigate across screens or enter responses on behalf of a student. The section Combining Accessibility Supports with Flexibility in Test Administration Procedures on page 24 describes additional allowable supports.

The following supports are NOT allowed:

- whole word or sentence dictation
- speech-to-text software
- selection of pictures or words from a word bank

The student is not allowed to dictate whole words or sentences since the full criteria for the administration of the writing testlets is not met and cannot be used for that purpose. Pictures, symbols, or words from a word bank are not allowed and may not be substituted for words in a sentence. This is forbidden because the meaning that an individual assigns to a picture or symbol depends upon the individual's motivation, neurological and developmental status, sensory abilities, cognitive, communication, and language skills, and world experience (Mineo Mollica, 2003).

Furthermore, the ability to learn the meaning of pictures or symbols is directly related to an individual's understanding of the word associated with the picture or symbol. In other words, individuals who understand the meaning of the spoken word learn the associated picture or symbol rather easily while individuals who do not understand the spoken word take much longer to learn the meaning of the picture or symbol (Ronski & Sevcik, 1996, 2005). Given that students who participate in the DLM alternate assessment have universally impaired cognitive and language skills, ensuring that each student's understanding of pictures and symbols in the assessment matches the intended meaning is not possible.

COMBINING ACCESSIBILITY SUPPORTS WITH FLEXIBILITY IN TEST ADMINISTRATION PROCEDURES

Effective use of the PNP Profile supports allows most students to have appropriate access to the assessment, making the DLM alternate assessment a meaningful indicator of students' knowledge and understanding of the Essential Elements. However, test administrators may need to combine the accessibility supports listed on the PNP Profile with practices that are part of the allowable flexibility in test administration procedures.

When customizing the assessment process with accessibility supports and allowable practices, keep in mind two general principles: (a) the student is expected to respond independently and (b) supports are to be familiar to the student because they have been used during routine instruction.

Table 5 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-delivered and teacher-administered testlets.

Table 5

Common Accessibility Issues and Example Solutions

Accessibility Issue	Example Solutions
The student has difficulty interacting directly with the computer due to limited experience, motor skills, or devices.	<ul style="list-style-type: none"> • Navigation in Student Portal <ul style="list-style-type: none"> ○ The test administrator may navigate the screens for the student. ○ After the student indicates their responses to the test administrator, the test administrator enters the responses on behalf of the student. ○ There are additional example solutions in this table for how students may indicate response options.
The student is blind and typically reads braille.	<ul style="list-style-type: none"> • Braille forms: For students who read braille proficiently enough to demonstrate what they know and understand about the Essential Elements, braille forms of the assessments are available. However, braille forms are available only at the Target linkage level and only for some Essential Elements. Braille forms for science are only available during the spring assessment window. Instructions for how to access and prepare for administering testlets in braille are in the EDUCATOR PORTAL USER GUIDE. • Alternate Form-Visual Impairment form: When a braille form is not available, an Alternate Form-Visual Impairment form may be available. These forms are also only available for some Essential Elements at the Target linkage level. • Human Read Aloud: The test administrator may always read the testlet aloud to the student. • Familiar materials and tactile graphics: The test administrator may use familiar materials or create tactile graphics in place of images that appear onscreen for a student. Familiar materials may be substituted for unfamiliar materials as long the criteria of the item being tested is met.

Accessibility Issue	Example Solutions
	<ul style="list-style-type: none"> • SHOW: When the educator directions in a testlet use words like SHOW, the test administrator presents the content of the testlet to the student using methods normally used during everyday instruction.
The student has a severe visual impairment and needs a larger presentation of content than the 5x magnification setting provides.	<ul style="list-style-type: none"> • Magnification: The test administrator may use an interactive whiteboard, projector, or any magnification device that works with the computer screen.
<p>The student is blind and does not communicate verbally.</p> <p>OR</p> <p>The student is blind, does not read braille, and uses only a single-switch system to communicate.</p> <p>The student receives testlets with pictures or manipulatives.</p> <p>The TIP does not provide alternate text to describe the pictures or guidance on how the test administrator can deliver this assessment.</p> <p>The student does not use braille, so that support was not chosen as a PNP Profile setting.</p>	<ul style="list-style-type: none"> • Human Read Aloud: The test administrator may use Human Read Aloud to read the testlet aloud to the student. • Familiar materials and tactile graphics: Objects, tactile graphics, or tactile representations of pictures or objects presented onscreen as a concrete representation may be used. Test administrators may use individualized tactile representations with their students, as appropriate. Access the TIP for more information.
The student uses sign language to communicate and has limited proficiency in reading text.	<ul style="list-style-type: none"> • Sign language: The test administrator may sign the text, spelling unfamiliar words and adapting or interpreting the language as needed. The test administrator may use signs that are familiar to the student.

Accessibility Issue	Example Solutions
<p>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. However, that practice is not allowed during the DLM alternate assessment.</p>	<ul style="list-style-type: none"> • Most Essential Elements that include a text focus on a student’s ability to make meaning from words. The text may be read aloud to the student by selecting the synthetic Spoken Audio or Human Read Aloud in the PNP Profile. However, the use of picture symbols to support word reading is not allowed. • Go to Supports: Allowed and Not Allowed on page 23 of this manual for more information about supports that are not allowed.
<p>The student uses low-tech (not computerized) eye gaze to communicate.</p>	<ul style="list-style-type: none"> • Offline response options: The test administrator may present the response options offline in an alternate format in which the student is accustomed. The test administrator will then enter the student’s selected responses in the testlet in Student Portal.
<p>The student uses eye gaze or another means and can only indicate yes/no responses.</p> <p>OR</p> <p>The student always selects the same response option (e.g., the first or the last option when presented the response options).</p> <p>OR</p> <p>The student can be presented only two response options at a time.</p>	<p>Alternate presentations of response options:</p> <p>The test administrator may present the item and response options as follows:</p> <ul style="list-style-type: none"> • First, read the item and response options that are presented onscreen. • Then, repeat the item and present response option 1, asking the student something like, “Do you want this option? Answer yes or no.” • The student provides their response. • The process is repeated for response option 2. • The process is repeated for response option 3 until all response options have been presented to the student. • If the student has indicated yes to more than one response option, read the selected options again, following the above process until the student has selected only one response option.

Accessibility Issue	Example Solutions
	<ul style="list-style-type: none"> • If the student has not narrowed the selection to one response option, the test administrator may try another approach such as the following example solutions. <ul style="list-style-type: none"> ○ The test administrator may present two response options at a time until the student has eliminated all but one response option. • To maintain validity, present the response options in the same order they are presented onscreen. • Present response option 1 and response option 2, and then say something like this to the student, “Which of these options do you want to choose?” • Be patient to allow the student time to select a response option. • Once a response is selected, present that response and option 3 and allow the student time to select a response. • Then, repeat the above process until all options have been presented. • When the responses have been narrowed to the final response, enter it in the testlet in Student Portal.
<p>The student is nonverbal but can indicate yes or no responses. The student typically uses partner-assisted scanning or an augmentative and alternative communication (AAC) device.</p>	<p>The test administrator downloads the TIP which has alternate text and pictures for the testlet. A testlet at the Initial linkage level includes picture-response cards that must be printed. The test administrator points to the pictures onscreen in the testlet or holds up the picture-response card and asks the student, “Is this your answer? Answer yes or no.” The test administrator moves through each of the answer options asking the same question. If the student answers yes to each option, the test administrator can also use the technique in the previous scenario, “The student can be presented only two response options at a time.”</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.	<ul style="list-style-type: none"> • Use of switches: <ul style="list-style-type: none"> ○ The test administrator may use partner-assisted scanning to point to and read each response option. ○ The student indicates when the desired response option is presented. ○ Also, the test administrator may navigate from screen to screen and allow the student to use scanning to select the desired response option on each item screen.
The student needs special equipment for the positioning of materials to respond to items (e.g., slant board) or non-computerized materials (e.g., hook and loop materials on a board).	<ul style="list-style-type: none"> • Special equipment: <ul style="list-style-type: none"> ○ The test administrator may use the equipment and materials that are familiar to the student. ○ The student continues to interact with the content on the screen. ○ The test administrator may navigate and enter responses that the student has indicated outside of Student Portal.
The student uses graphic organizers, supports, or other materials to complete academic work.	<ul style="list-style-type: none"> • The test administrator may use the supports and materials that are familiar to the student. The student continues to interact with the content onscreen, but the test administrator may navigate and enter the student's responses into Student Portal. Access the TIP for each testlet for specific approved and unapproved materials.
The student has a physical disability that results in limited mobility. The testlet requires the student to manipulate materials.	<ul style="list-style-type: none"> • A student with limited mobility may use their current mode of communication to direct the test administrator to select a response option or manipulate materials on their behalf. • The test administrator also may use the strategy of partner-assisted scanning for testing. The test administrator may select this setting in the student's PNP Profile. <p>Note: Partner-assisted scanning is a strategy used outside of the system. It is a Category 3 setting in the PNP Profile, and as such, does not make a direct change to a testlet.</p>

While allowed supports and practices during assessment administration offer a great deal of flexibility, some practices are not allowed. These practices are summarized in Table 6.

Table 6

Practices Not Allowed in Administering Testlets

Practices Not Allowed
<ul style="list-style-type: none">• Repeating the item after the student has selected a response. This action is considered prompting and may influence the student to choose a different response.• Using physical prompts or hand-over-hand guidance.• Reducing the number of response options or giving content hints.• Modifying the content of a performance task in a computer-delivered testlet to help the student arrive at the correct response.• Changing tone, inflection, or body language to cue the correct response when reading testlets to a student.

Go to Supports: Allowed and Not Allowed on page 23 of this manual for more information about supports that are prohibited.

OTHER ASSESSMENT RESOURCES FOR STUDENTS WITH COMPLEX NEEDS

Students who take the DLM alternate assessment can indicate their response through whatever means allowed. Sometimes test administrators need to think creatively about how to support students with different means of expressive communication.

Using the general principles above and specific examples of supports that are allowed and not allowed, the test administrator plans assessment sessions for students who need additional supports. If supports that are not listed in this guide are provided, test administrators may be asked to describe these supports, as determined by state policy. The assessment coordinator can provide more information about state guidelines on additional supports.

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 the appropriateness of calculator use. While a test administrator may normally use all the supports selected in the PNP Profile, the TIP also indicates when using a particular support is not appropriate for a specific testlet. The TIP for the testlets at the Initial linkage level includes picture-response cards that must be printed before testing begins since the picture-response cards are used during test administration. Best practice is to print the cards in color.

Test administrators can access the TIP in Educator Portal when each testlet is assigned to a student. Test administrators are to review the TIP and gather any necessary supports before beginning a 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 GUIDE. Sample TIPS are available on each state's webpage on the [DLM website](#). Also, access the Test Tickets and TIPS helplet on the [Educator Resource Videos](#) on the DLM website.

NOTE: The TIP for testlets at the Initial linkage level contains more information than TIPs for testlets at higher linkage levels. For a testlet at the Initial level, the test administrator will likely need to gather materials in addition to printing picture-response cards.

For the majority of computer-delivered testlets at the Precursor or Target linkage level, almost everything a student needs is on the computer screen within the testlet itself. Although, this is not always the case.

STEP 4: SELECT AND VIEW SUPPORTS IN THE KITE SYSTEM

DEMONSTRATION OF PERSONAL NEEDS AND PREFERENCES SUPPORTS: WHAT STUDENTS WILL EXPERIENCE

This section provides more information, including screenshots, related to some of the PNP Profile accessibility supports described in Step 2 of the customization process. The supports described in this section include magnification, overlay color, invert color choice, contrast color, Spoken Audio, and switch use. Test administrators can explore and try the PNP Profile supports online through released testlets and can practice using the supports with students in Student Portal. Providing students ample time to use the supports in the released testlets enables test administrators to determine which ones work best for each student.

HINT: Combining overlay color, invert color choice, and contrast color results in a layering of the options, which is counterproductive and will not be helpful to the student.

Magnification

When test administrators choose magnification, the system zooms in on the whole screen (Figure 5 and Figure 6). The magnification options are 2x, 3x, 4x, and 5x. Depending on the amount of magnification, test administrators will have to scroll to the right and down to access the entire screen and find the **NEXT** button when magnification is selected. Test administrators must keep in mind that scrolling may negatively affect the student's ability to access the assessment.

Figure 5. A screenshot featuring 2x magnification.

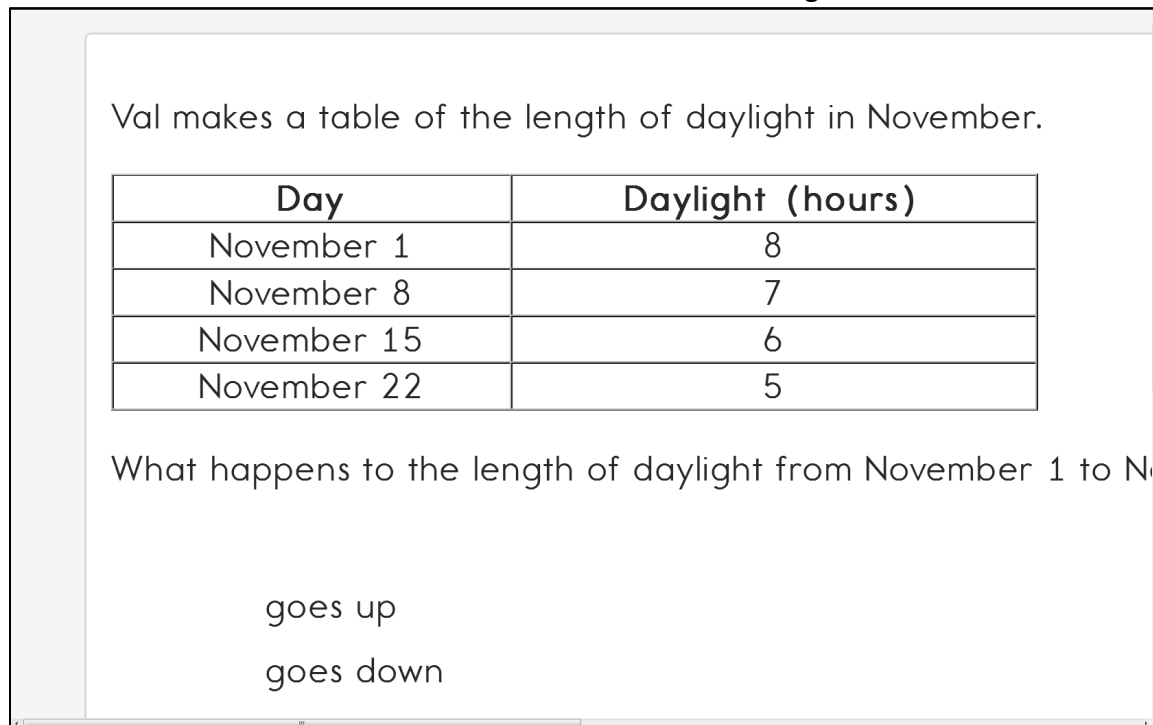
Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

- goes up
- goes down
- stays the same

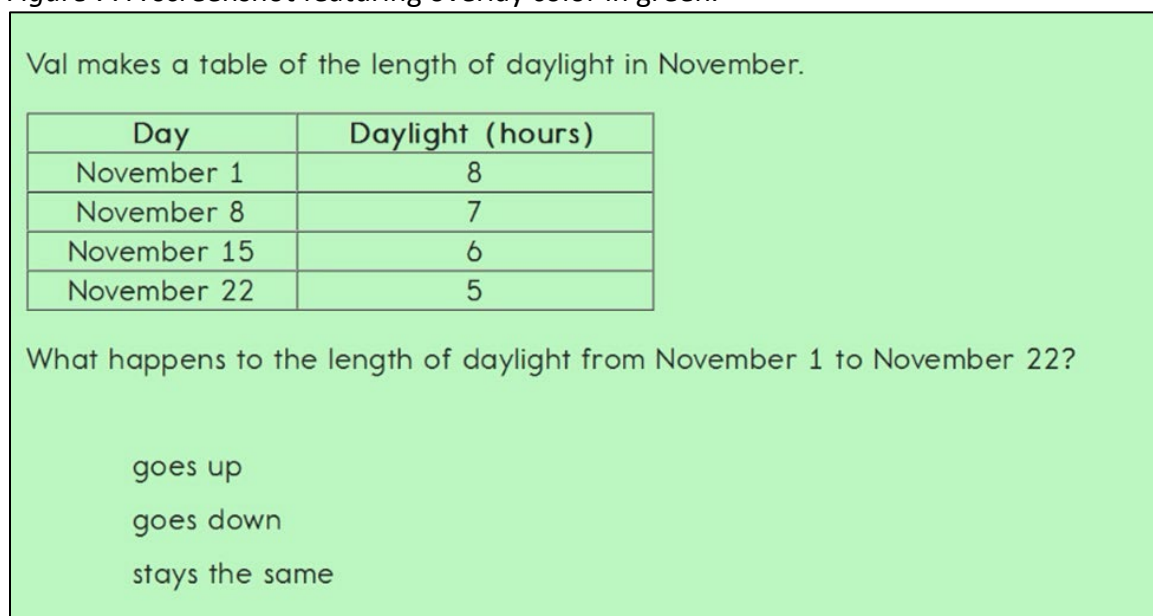
Figure 6. A screenshot featuring 5x magnification. Users must scroll to the right and left and up and down because the size of the content exceeds the viewing area.



Overlay Color

The background overlay color options are blue, green, pink, gray, and yellow. The default is white. The font remains black (Figure 7).

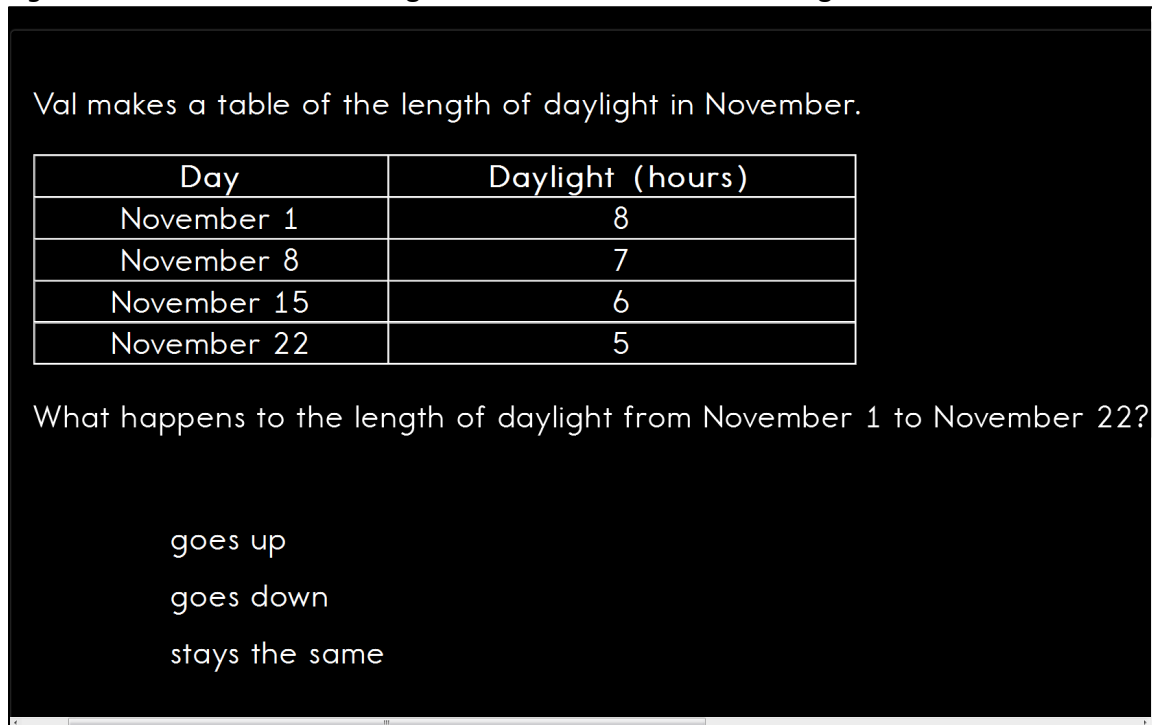
Figure 7. A screenshot featuring overlay color in green.



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 8).

Figure 8. A screenshot featuring Invert Color Choice and 4x magnification.



Contrast Color

Contrast color allows the test administrator to change both the background and the font color. The background and font color options are white background with green font (Figure 9), white background with red font, black background with gray font, or black background with yellow font.

Figure 9. A screenshot demonstrating contrast color that features white background with green font and 4x magnification.

Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

goes up

goes down

stays the same

Spoken Audio

Spoken Audio has three types of options: text only, text and graphics, and nonvisual. The text and graphics option and the nonvisual option provides 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 includes information about choosing response 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 Figure 10.





Figure 10. Screenshot featuring Spoken Audio icon.


Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

goes up
goes down
stays the same

BACK    READ  NEXT



After selecting the **READ** button, the Kite system reads the text aloud. As shown in Figure 11, Student Portal highlights the sentence while being read. Different information is read aloud depending on which option is selected in the PNP Profile: text and graphics, text only, or nonvisual.

Figure 11. A screenshot of how Student Portal highlights text during Spoken Audio.

Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

- goes up
- goes down
- stays the same

Navigation buttons: BACK, EXIT DOES NOT SAVE, PAUSE, NEXT.

Switch Use

Table 7 and Table 8 summarize the actions that occur when switches are used for switch-accessible items in Student Portal. In both cases, if switch access is selected in the PNP Profile, then a switch interface is required for the student to interact with the testlets in Student Portal.

Table 7

Single-Switch Use by Item Type

Item Type	Single-Switch System
Multiple choice: Text or pictures as response options.	<p>When Single Switch is selected, Student Portal scans through each response option and navigation button on the page based upon settings selected in the student's PNP Profile. The following can be selected:</p> <ul style="list-style-type: none"> • Activate by Default: This is automatically selected and cannot be changed. • The Scan Speed (Seconds): The number of seconds the response option is highlighted before the highlighting moves on to the next response option. • The Automatic Scan - Initial Delay: The length of the delay before scanning begins on each screen of a testlet. • Value in Seconds: The length of the delay in seconds. • Manual Override: The student to initiates the scanning action on each screen of a testlet by pressing the switch. • The Automatic Scan Repeat Frequency: This is the number of times the item on each screen is scanned before the scanning cycle stops. The number can be 1–5 or infinity.
General Information	In automatic scanning or manual override, the scanning stops after selecting a response option. The scanning cycle restarts from the beginning when the student presses the switch.

Table 8

Two-Switch Use by Item Type

Item Type	Two-Switch System
Multiple-choice: Text or pictures as response options.	<p>The student uses the switch set to emulate the Tab key to move from one response option to the next. Student Portal highlights each response option and navigation button as the Tab key switch is activated.</p> <p>The student uses the switch set to emulate the Enter key to select a response option when highlighted to indicate the desired response.</p>
General Information	After selecting a response option, selecting the Tab key restarts the cycle over from the beginning.

Activating the switch will highlight each option for the student. The **BACK** button is highlighted, as shown in Figure 12.

Figure 12. A screenshot featuring a single-switch and two-switch example with a highlighted BACK option.

Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

goes up
goes down
stays the same




BACK   **NEXT** 

Figure 13 shows how the response options are also highlighted.




Figure 13. A screenshot featuring a highlighted response option.

Val makes a table of the length of daylight in November.

Day	Daylight (hours)
November 1	8
November 8	7
November 15	6
November 22	5

What happens to the length of daylight from November 1 to November 22?

goes up
goes down
stays the same

BACK   **NEXT** 

HINT: When using single-switch or two-switch scanning, do not choose yellow for overlay color in the PNP Profile, as both features highlight the text in yellow as the response options are scanned. Therefore, overlay color in yellow makes the single-switch and two-switch scanning highlighting feature hidden to the student.

STEP 5: PREPARE FOR THE ASSESSMENT—USING THE CHOSEN ACCESSIBILITY SUPPORTS

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

- appropriate assistive devices for the student (e.g., switches)
- additional supports familiar to the student for use during the assessment (e.g., unit cubes)
- concentration aids 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.

ACCESSIBILITY STRATEGIES

Help students prepare for the DLM assessment by providing instruction aligned to the Essential Elements and reinforce vocabulary found in the Essential Elements. Also, test administrators can help students develop comfort and confidence with the assessment format by using practice and released testlets.

In addition, the DLM Consortium created online professional development learning modules to help test administrators understand both the content standards and the Essential Elements, 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 under the Professional Development tab of the [DLM website](#). Most of the modules are subject-specific and provide information and strategies to help test administrators instruct students based on the subject being assessed in Student Portal.

STRATEGIES FOR STUDENTS WITH THE MOST COMPLEX NEEDS

Three of the professional development modules are especially designed for instruction for students with the most complex needs who complete the DLM assessments at the Initial and Distal Precursor linkage levels. Professional development modules are located through the [DLM Professional Development](#) website.

- “Beginning Communicators” describes symbolic and non-symbolic forms of communication, the distinction between pre-intentional and pre-symbolic communicators, and identifies additional sources of support for building communication skills.
- “Symbols” is an overview of symbols to support communication and interaction. It also describes the use of symbols and photographs in text.

- “DLM Core Vocabulary and Communication” focuses on the use of core vocabulary as a support for communication for students who cannot use speech to meet their face-to-face communication needs and require augmentative and alternative communication.

STEP 6: EVALUATE THE ACCESSIBILITY SUPPORTS USED AFTER ASSESSMENTS

After the student completes all the testlets during the assessment window, test administrators and IEP teams evaluate the overall use of the accessibility supports. Test administrators become better informed and able to customize accessibility supports for future assessments. Test administrators 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. Which accessibility supports did the student use during instruction and assessment?
2. What were the results of classroom assignments and assessments when accessibility supports were used compared to when they were not used?
3. If a student did not meet the expected level of performance, was it caused by not having access to the necessary instruction, not receiving the appropriate supports, or using inappropriate accessibility supports?
4. How well did the student perceive the accessibility supports to work?
5. Which combinations of accessibility supports seemed to be effective?
6. What difficulties, if any, were encountered in the use of the accessibility supports?
7. How well did test administrators and other observers perceive the accessibility support to work?
8. Did the student receive the accessibility supports documented in their IEP?
9. Are the selected accessibility supports appropriate for the student’s continued use or should any be discontinued?

REFERENCES

- Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015–2016).
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GLOSSARY

This glossary compiles relevant definitions and acronyms for the Dynamic Learning Maps® (DLM®) alternate assessment.

Term	Definition
display enhancements	Options that change the testlet appearance on the student’s device screen, including magnification, overlay color, invert color choice, and contrast color.
Educator Portal	Educator Portal is a secure, web-based application designed to aid teachers and administrative users in the administration of assessments, including student enrollment and monitoring or tracking results. Users can access Educator Portal using any supported browser via https://educator.kiteaai.org/ . For information on working within Educator Portal, access the DATA MANAGEMENT MANUAL and the EDUCATOR PORTAL USER GUIDE on the DLM website.
engagement activity	An activity at the beginning of a testlet that describes a scenario, recalls prior knowledge or experience, or introduces the concept to be addressed. The engagement activity provides context for the items. Some science testlets at the upper linkage levels include a short video without audio as the engagement activity.
Essential Elements	Essential Elements are the content standards used for assessment for students with the most significant cognitive disabilities. Essential Elements are reduced in depth, breadth, and the level of complexity, and they build a bridge from the content in the grade-level standards to academic expectations. They are specific statements of knowledge and skills linked to the National Research Council’s Framework for K-12.
First Contact survey	<p>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 communication, assistive technology devices, motor and sensory impairments, and academic performance.</p> <p>In the optional instructionally embedded assessment window, data gathered from the core questions from the survey are used to recommend the linkage level for each ELA and mathematics Essential Element. In addition to the core</p>

questions, data gathered from the science questions are used to **recommend** the linkage level for each science Essential Element. Data gathered from the core questions plus data from the writing questions are used to **recommend** the linkage level for the writing testlet.

In the spring assessment window, data gathered from the core questions are used to **assign** the linkage level for the student's first ELA and mathematics testlets.

Data gathered from the core questions plus data from the science questions are used to **assign** the linkage level of the student's first science testlet.

In the spring window, data gathered from the core questions plus data from the writing questions are used to **assign** the linkage level for the writing testlet, instead of performance of previously completed testlets.

**Instruction and
Assessment Planner**

A part in Educator Portal where test administrators perform assessment functions for a student during the optional instructionally embedded assessment window. Functions include selecting an Essential Element and linkage level for instruction and subsequent testing. Most assessment data about the student is provided in the Instruction and Assessment Planner during this window, including a mastery of a tested Essential Element at a linkage level.

Kite Student Portal

Student Portal is a secure testing platform used by students to take testlets. Once launched, Student Portal prevents students from accessing unauthorized webpages or applications during testing.

All students taking the DLM alternate assessment will have unique accounts in Kite Student Portal. Test administrators do not have accounts in Student Portal.

In addition to operational testing in the Student Portal, practice activities and released testlets can be administered using Student Portal. The login credentials for the practice activities and released testlets are unique to each one. Access the TEST ADMINISTRATION MANUAL for more information about Student Portal.

linkage level

An incremental level of complexity toward the learning target where an assessment was developed for the Essential Element. Science has three linkage levels: Initial, Precursor, and Target. Linkage levels are always related directly to grade-

	level Essential Elements but at different levels of cognitive complexity. The Target level is most closely related to the grade-level expectation.
materials	Any objects, manipulatives, and tools used during an assessment. Materials Collection lists are specific for each subject during each window. The lists are found on each state’s DLM website under Educator Resources.
Personal Learning Profile	A collective term used to describe a student’s personal needs and preferences settings entered in the PNP Profile in addition to information about the student entered in the First Contact survey in Educator Portal.
Personal Needs and Preferences (PNP) Profile	Student-specific information that informs Kite Student Portal about an individual student’s personal needs and preferences for each testlet. The PNP Profile includes information the system needs to make the student’s user interface in Student Portal compatible with their accessibility needs. The PNP Profile includes information about display enhancements, language and braille, and audio and environmental supports. Educators who know the student provide the information in the profile found in Educator Portal.
plan	A plan is created in the Instruction and Assessment Planner in Educator Portal only during the optional instructionally embedded assessment window. A plan includes the educator-selected Essential Element and educator-selected linkage level and leads to the educator-assigned testlet for science.
released testlets	A released testlet is a publicly available, sample DLM assessment. Released testlets may be used by students and teachers as examples or opportunities for practice. Released testlets are developed using the same standards and methods used to develop testlets that are used in DLM operational assessments. New released testlets are added periodically.
state education agency (SEA)	A state department of education.
stem	The beginning part of the item that presents a problem to solve or an item to respond to. The stem may also include other relevant information in the item. A multiple-choice item is a common example in the DLM alternate assessment, consisting of a stem and a set of response options from which to choose.

**Student Activity
Table**

A page in the Instruction and Assessment Planner in Educator Portal. The Student Activity Table provides an at-a-glance overview for all students rostered to the test administrator in the subjects in which the students are being tested during the optional instructionally embedded assessment window. The data in the Student Activity Table populates based on the test administrator's actions on the Student View Page for each student (i.e., how many testlets were administered).

The table also includes three icons providing easy access to the First Contact survey, PNP Profile, and the student's credentials.

testlet

A short assessment that begins with an engagement activity and includes three to five items. Together the items increase the instructional relevance of the assessment and provide a better estimate of a student's knowledge, skills, and understandings than can be achieved by a single assessment item. All students receive 9 testlets. In states delivering end-of-instruction biology, students receive 10 testlets. Each testlet assesses only one Essential Element. Testlets are delivered one at a time, are adaptive, and are either teacher-administered or computer-delivered. More specific information is found in the TEST ADMINISTRATION MANUAL.

DLM APPENDIX

APPENDIX A: OTHER SUPPORTS

Table 9 describes options available under the **Other Supports** tab in the Personal Needs and Preferences (PNP) Profile in Educator Portal.

Table 9

Additional Supports in the Personal Needs and Preferences Profile

Other Supports	Definition
Alternate Form-Visual Impairment	Most testlets are designed for all students taking the DLM alternate assessment. For a limited number of Essential Elements and linkage levels, alternate forms are provided for students with visual impairments. These testlets are teacher-administered (not braille). When alternate forms are available, selecting this option will direct Student Portal to deliver that form. Alternate forms are not available for all Essential Elements at all linkage levels; when not available, a standard form will be delivered.
Two-Switch System	Student Portal automatically supports two-switch step scanning with a switch interface in which 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. Test administrators record two-switch scanning in PNP Profile settings.
Individualized Manipulatives	Test administrators may use manipulatives that are familiar to students (e.g., abacus, unit cubes, interlocking blocks, counters, linking letters).
Calculator	Test administrators may use a calculator unless the TIP indicates a calculator may not be used.
Human Read Aloud	Test administrators may read the assessment aloud to students. Alternate text for test administrators who will deliver the human read aloud will include descriptions of graphics and alternate text descriptions of images and are provided as additional pages after the main TIP.

Other Supports	Definition
Sign Interpretation	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), Signed Exact English, or personalized sign systems. Sign language interpreters use the alternate text provided in the TIP for simple picture descriptions.
Language Translation	For students who are English learners and whose best expressive or receptive communication is a language other than English, test administrators may translate the assessment for the student. The Kite system does not provide language translations. State policy will determine whether translation can be used.
Masking	Masking is not an option in Student Portal, but it is an acceptable support for students with visual impairments. Test administrators may use a piece of paper to cover portions of the screen to reduce visual clutter without otherwise affecting the information or number of response options.
Test Administrator Entering of Responses for Student	If students are unable to select response options themselves, they may indicate their responses through normal response types and forms of communication, such as eye gaze or gesture; test administrators may then key in those responses. This option is to be used only when students are unable to independently and accurately record their responses in Student Portal.
Partner-Assisted Scanning (PAS)	Partner-assisted scanning is a support in which test administrators assist students with scanning students' response options. Students indicate when their desired responses are presented. Test administrators record partner-assisted scanning in PNP Profile settings.

APPENDIX B: RELEVANT FEDERAL LEGISLATION

EVERY STUDENT SUCCEEDS ACT OF 2015

The Every Student Succeeds Act (ESSA) replaces the No Child Left Behind Act of 2001 and amends the Individuals with Disabilities Education Improvement Act of 2004. 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

...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]

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 for each student'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)]

Appendix C: DLM Accessibility Worksheets for Test Administrators and IEP Teams

States may use these worksheets (Table 10, Table 11, Table 12) to indicate which supports must be determined by IEP teams and to document the supports provided to each student. When updating supports during testing, note that Category 1 supports update in the system immediately, as do individual manipulatives and calculator use from Category 2. However, four of the Category 2 supports require 24 hours to update: braille, Alternate Form-Visual Impairment, Single-Switch, and Two-Switch systems.

Table 10

Accessibility Worksheet: Category 1—Settings in the PNP Profile that Activate Supports within Student Portal

Accessibility support	Setting selected for STUDENT NAME	Notes and evaluation
Magnification		
Overlay color		
Invert color choice		
Contrast color		
Spoken Audio: Text only		
Spoken Audio: Text and graphics		
Spoken Audio: Nonvisual		

Table 11

Accessibility Worksheet: Category 2—Settings in the PNP Profile that Require Supports or Materials in Addition to Those within Student Portal

Accessibility support	Setting selected for STUDENT NAME	Notes and evaluation
Uncontracted braille: EBAE		
Uncontracted braille: UEB		
Single-switch system (Access Profile enabled)		
Two-switch system		
Individualized manipulatives		
Calculator (refer to TIP)		
Alternate Form-Visual Impairment		

Table 12

Accessibility Worksheet: Category 3—Settings in the PNP Profile that Require Supports Provided by the Test Administrator Outside of Student Portal

Accessibility support	Setting selected for STUDENT NAME	Notes and evaluation
Human read aloud		
Sign interpretation of text		
Language translation of text		
Test administrator entering of student responses		
Partner-assisted scanning		

STATE APPENDICES

DOCUMENT HISTORY

NOTE: 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
07/01/2021	Added Live Chat to the options for contacting the service desk	3
07/01/2021	The addition of a scenario to the Accessibility Issue/Solution chart	25
07/01/2021	Edits to text throughout the manual	Throughout