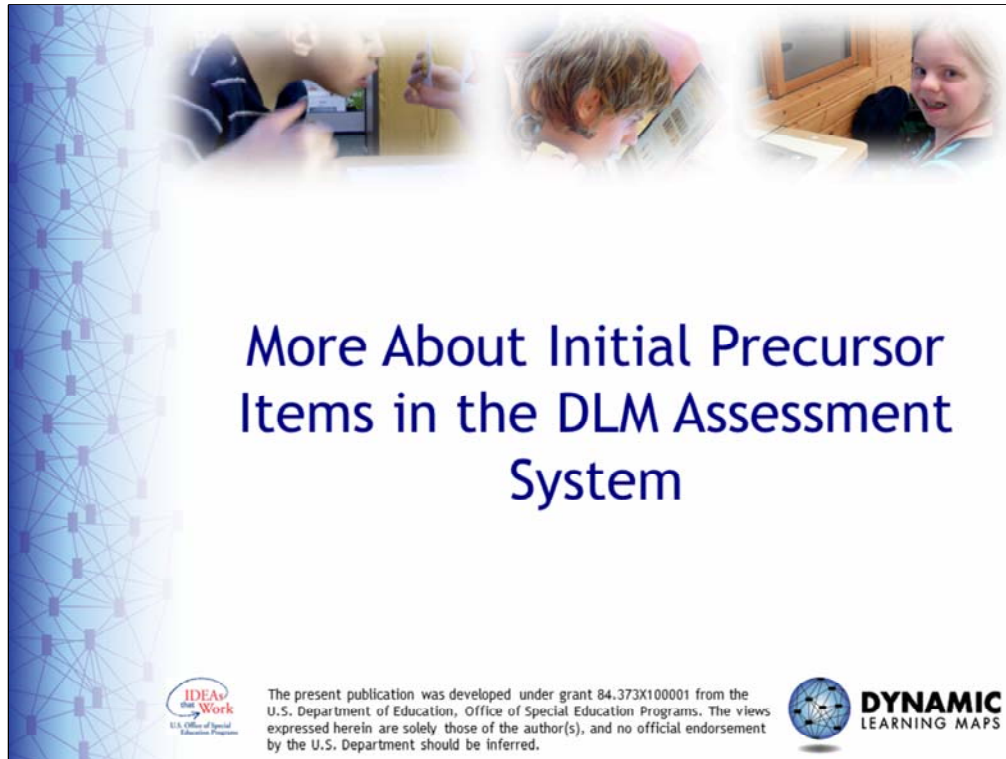The Dynamic Learning Maps™ Alternate Assessment System is a new assessment designed to more validly measure what students with significant cognitive disabilities know and can do. This video will provide additional information about the items and groups of items, or testlets, on the DLM™ assessment that are intended for use with students with the most complex multiple disabilities who may still be developing symbolic communication and consistent response modes.

More About Initial Precursor Items in the DLM Assessment System

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The items targeting these students are called Initial Precursor items. The name was selected because these items test skills that are at the beginning the pathways toward the target skill reflected in the grade level Essential Element. As such, they are the initial steps. Precursor means something that comes before but is directed related to. As such, the initial precursor items reflect beginning level skills and understandings but they relate directly to the targets that are assigned at each grade level.

For each Essential Element at every grade level, DLM develops items at several different levels of complexity. Each level addresses a portion of the map that contains content related to the target Essential Element. The levels are called linkage levels. Linkage levels are identified by starting with the node or nodes in the learning map that most closely match the target Essential Element. Then, multiple pathways on the map are carefully inspected to identify nodes that link directly to the target but are precursors to it.

In the DLM assessment, each of the three linkage levels that come before the target are called precursor levels. After the initial precursor comes the distal or distant precursor, and then the proximal precursor, which is closest to or in close proximity of the target.
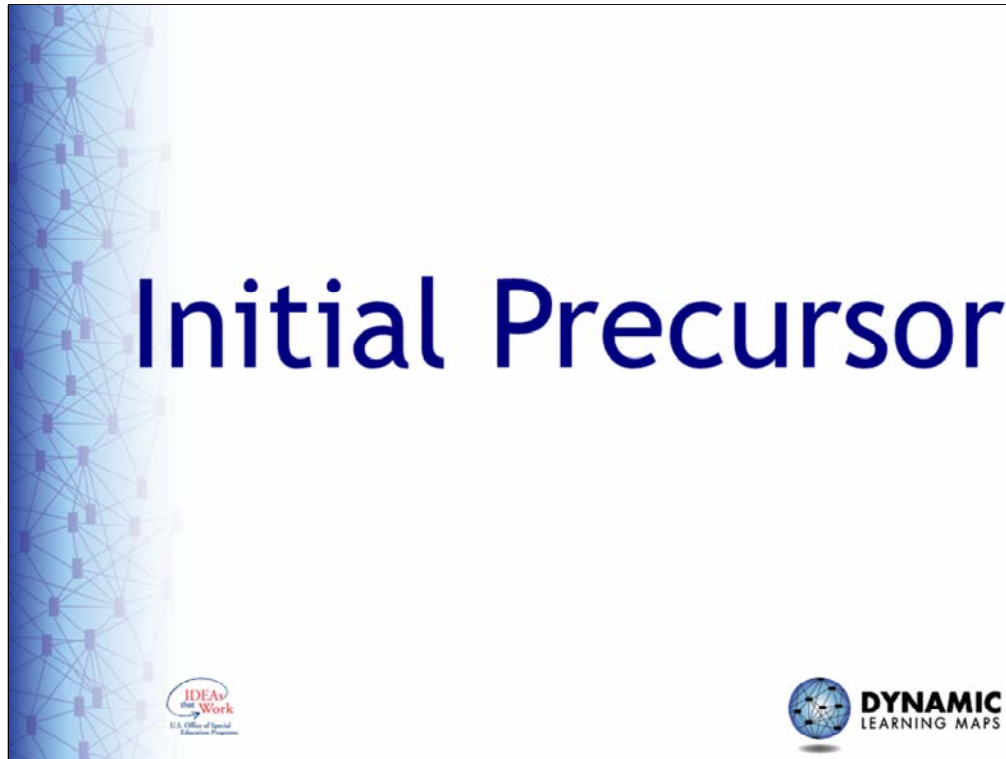
This video focuses on the Initial Precursor linkage level. The initial precursor is the easiest linkage level. Items developed at this initial precursor level typically reflect foundational nodes in the learning map. These early, foundational nodes connect directly back to the Essential Element through one or more pathways in the learning map.

Items at the initial precursor linkage level are typically intended for students who do not yet have symbolic communication, and are usually administered by the teacher, who observes the student's behavior as directed by the system, and then records responses in the system.
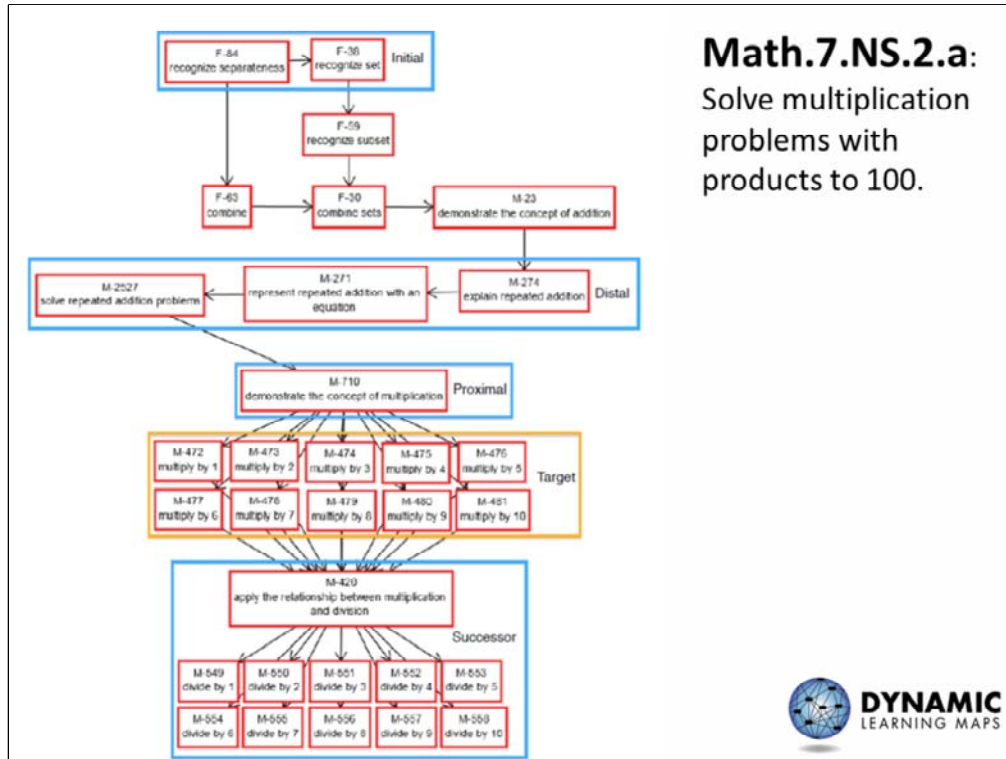
Let's look at a set of initial precursor items in mathematics. These initial precursor items relate to the 7th grade Essential Element in Number Sense that reads, "*Solve multiplication problems with products to 100.*"

This picture shows the mini-map. It gives you a visual representation of the main pathway from the initial precursors at the top of the image down to the target nodes and beyond.
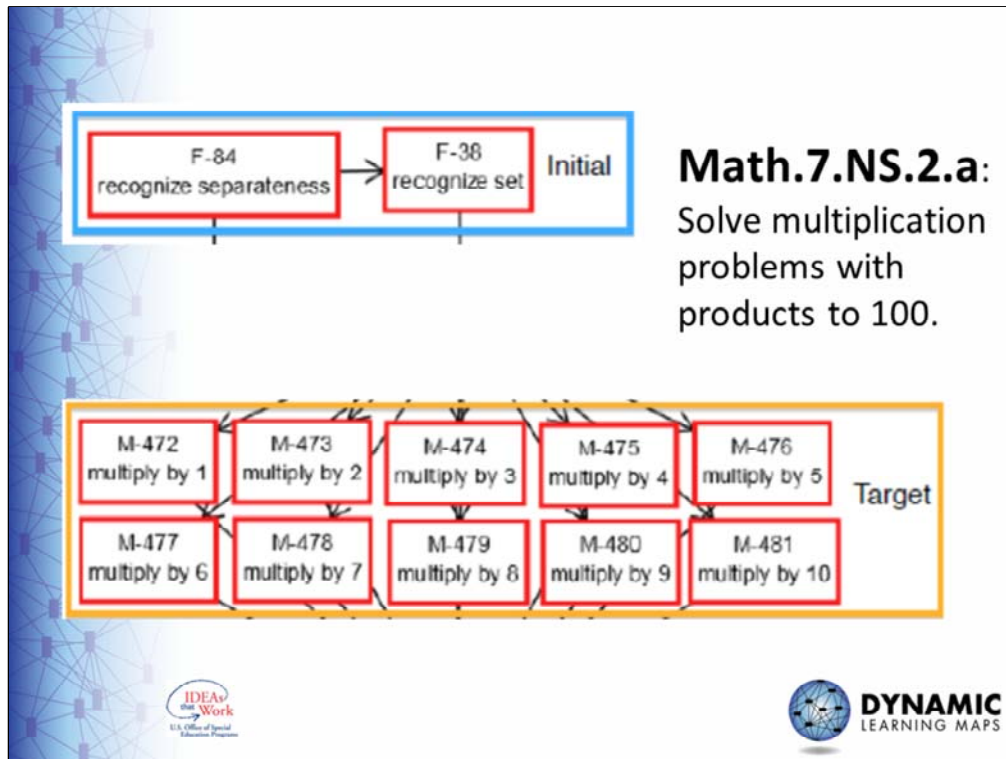
For the Essential Element, "*Solve multiplication problems with products to 100,*" there are 10 target nodes representing the ability to multiply by 1, 2-, 3- and so on up to 10. The initial precursor nodes for this Essential Element focus on representing separate and set. The nodes link to multiplication because students must first develop the conceptual understanding that things can be separated and then put together into a set before they can combine those sets and eventually multiply them.
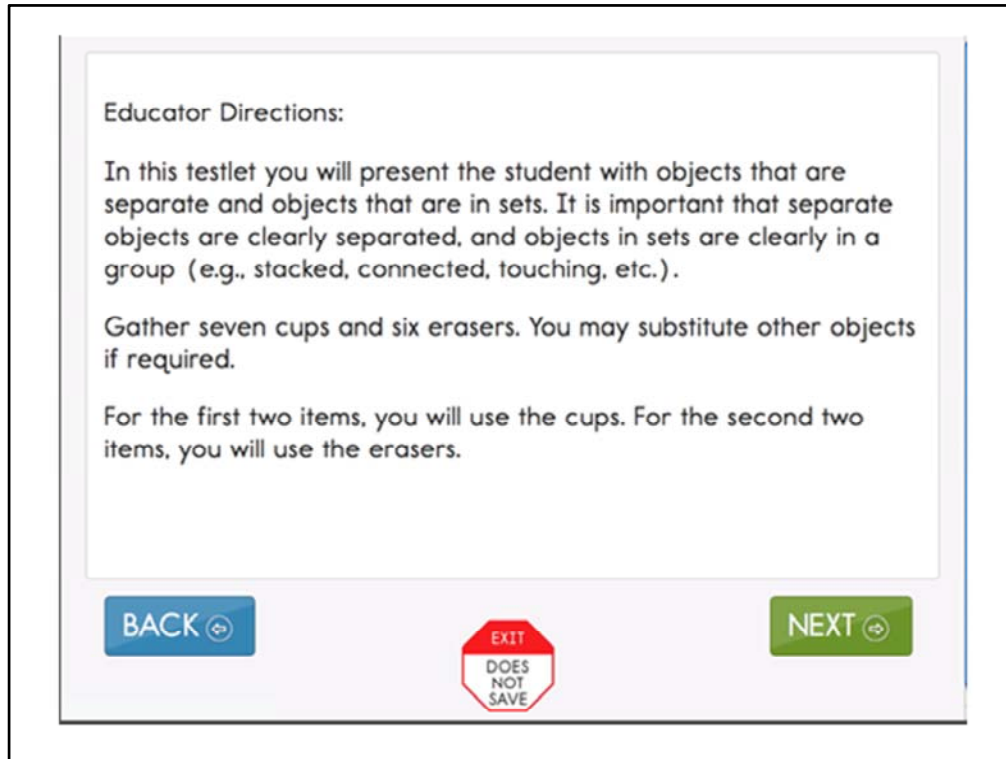
First Contact Survey

The DLM™ system presents initial precursor items to students based on the information teachers provide in the First Contact Survey. For example, if the teacher indicates that the student does not use speech, signs, or symbols to communicate or uses them in very restricted ways, it is likely that a student will be assigned an initial precursor items as a starting place. Some students may have these communication skills but their teachers indicate on the First Contact Survey that they are not able to demonstrate skills in English language arts or mathematics. These students might also start with initial precursor items. Finally, students may be routed to initial precursor items if they struggle with higher-level items after they have started using the DLM™ system. This routing process is automated by the DLM™ system, but begins with the information provided by teachers when completing the First Contact Survey.
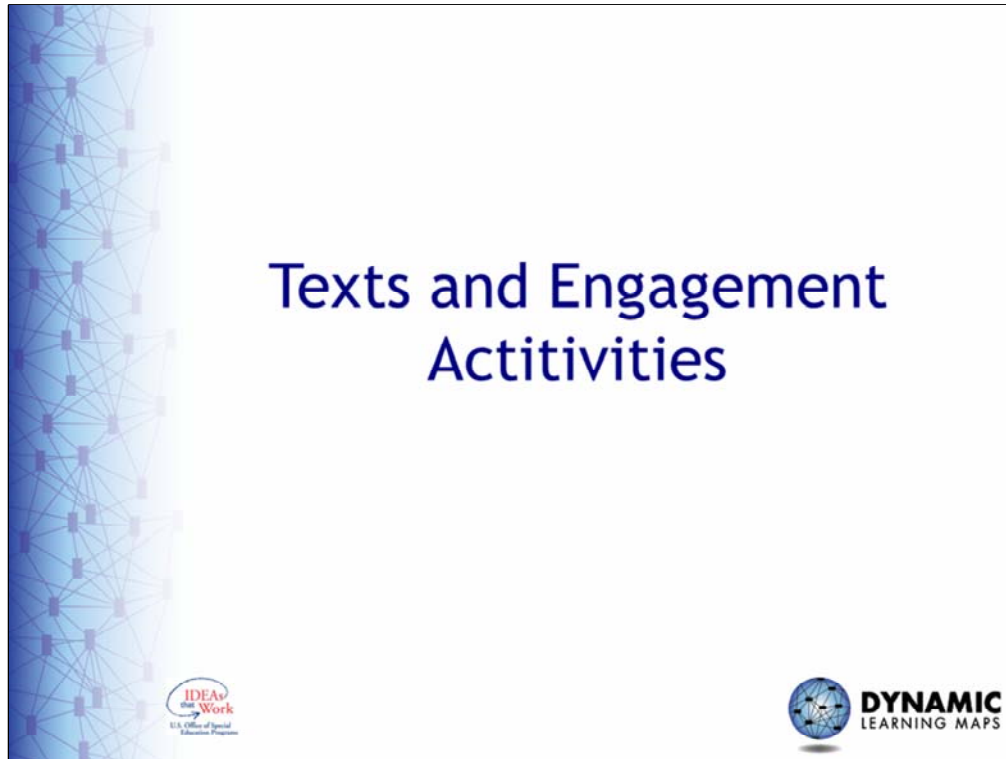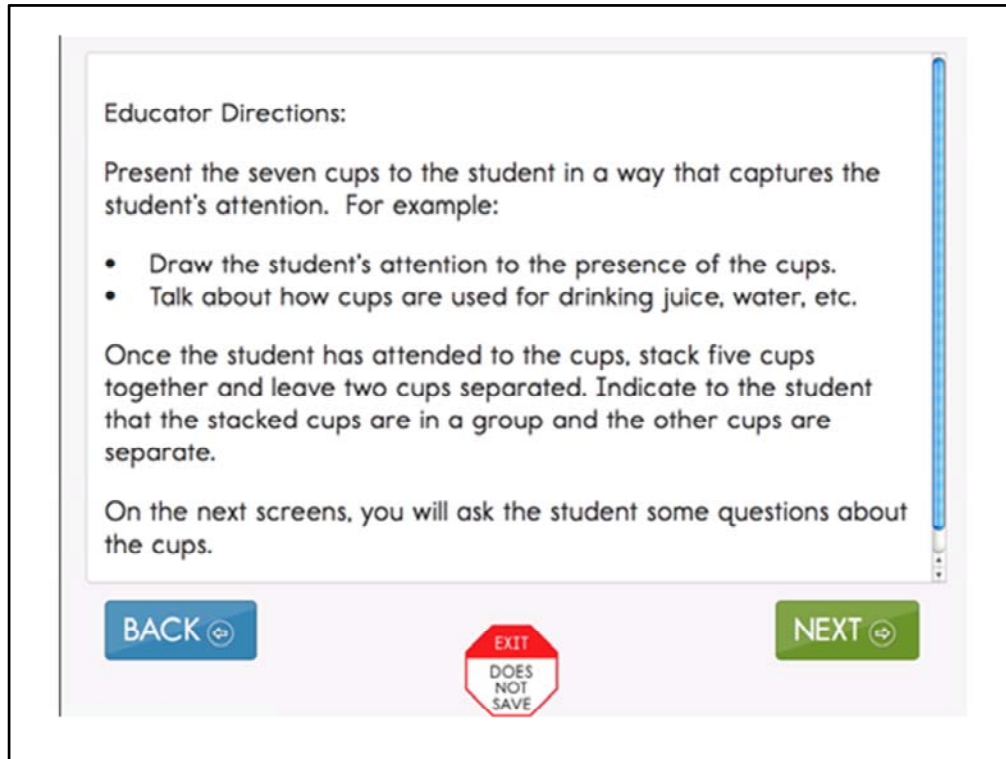
The DLM™ items in English language arts and math are delivered differently. For example, each English language arts item appears with other items that are linked to a text. The texts are adapted from grade-level reading lists to reduce the complexity and length. At the initial precursor level, book sharing provides a context for meaningful, language-based assessment of foundational skills. In contrast, Math items are built around an engagement activity designed to activate prior knowledge and provide a context for the assessment items.

Let's start by looking at a set of initial precursor items in math.

Educator Directions:

In this testlet you will present the student with objects that are separate and objects that are in sets. It is important that separate objects are clearly separated, and objects in sets are clearly in a group (e.g., stacked, connected, touching, etc.).

Gather seven cups and six erasers. You may substitute other objects if required.

For the first two items, you will use the cups. For the second two items, you will use the erasers.

BACK ⊜   EXIT DOES NOT SAVE   NEXT ⊜

The Initial precursor items are administered by the teacher with the support of directions provided on the screen. Here you see the educator directions. This screen explains the activity, the kind of objects or materials that are needed, and any information required regarding how to set up the objects or materials. These directions say, "*In this testlet you will present the student with objects that are separate and objects that are in sets. It is important that separate objects are clearly separated and objects in sets are clearly in a group (for example, stacked, connected, touching, etc.). Gather seven cups and six erasers. You may substitute other objects if required. For the first two items, you will use the cups. For the second two items, you will use the erasers.*" Note that if you don't have access to 6 erasers or there is a good reason not to use erasers with the student, a group of 6 objects can be substituted for erasers. Throughout the DLM™ assessment you may substitute objects if needed.

Educator Directions:

Present the seven cups to the student in a way that captures the student's attention. For example:

- Draw the student's attention to the presence of the cups.
- Talk about how cups are used for drinking juice, water, etc.

Once the student has attended to the cups, stack five cups together and leave two cups separated. Indicate to the student that the stacked cups are in a group and the other cups are separate.

On the next screens, you will ask the student some questions about the cups.

BACK ⊛   EXIT DOES NOT SAVE   NEXT ⊛

The next screen of teacher directions reads, "*Present the seven cups to the student in a way that captures the student's attention. For example: Draw the student's attention to the presence of the cups. Talk about how cups are used for drinking juice, water, etc. Once the student has attended to the cups, stack five cups together and leave two cups separated. Indicate to the student that the stacked cups are in a group and the other cups are separate. On the next screens, you will ask the student some questions about the cups.*"

Educator Directions:

SHOW: the stacked cups.
SAY: "**Here are some cups.**"

SHOW: the separate cups.
SAY: "**Here are some more cups.**"

SHOW: the stacked cups and the separate cups.
SAY: "**Show me the group of cups.**"

BACK ⊙

EXIT
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NOT
SAVE

NEXT ⊙
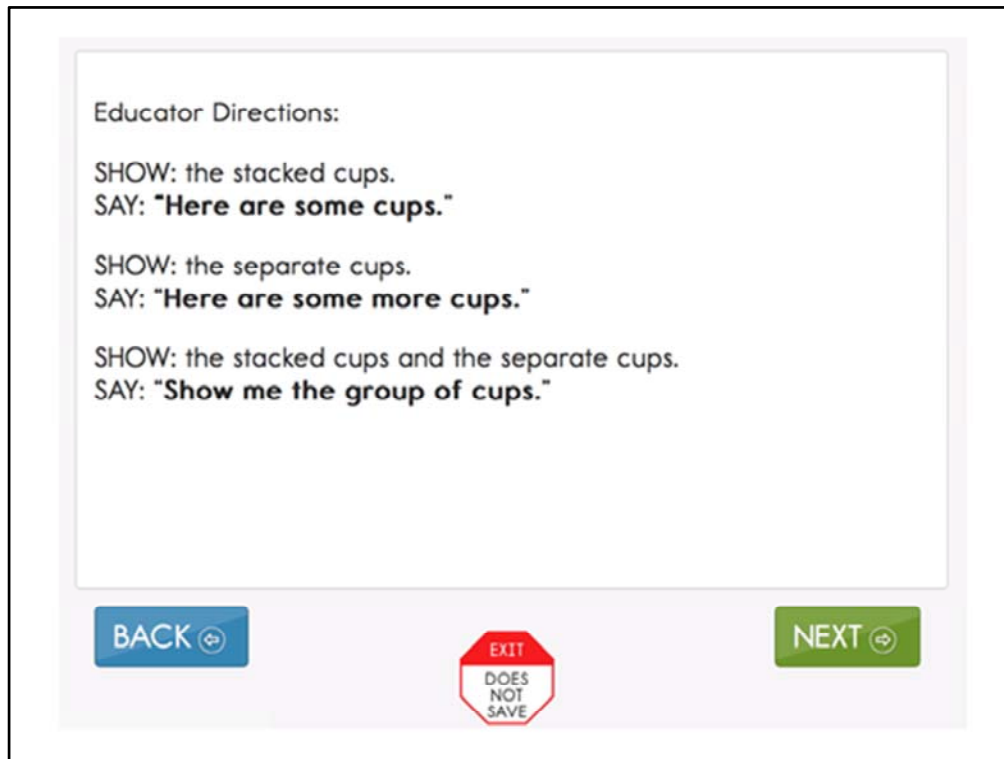
Finally, the third screen tells you how to present the cups and what to say. You will show students the stack of 5 cups and say, "*Here are some cups.*" Then you will show students the two separate cups and say, "*Here are some more cups*." Then you point to both the stacked cup and the separate cups and say, "*Show me the group of cups.*" If the student has low vision or blindness, it is acceptable for you to show the students the two choices by placing them in the students hands or helping the students locate the choices in space.

After you've asked the student to, "*Show me the group of cups,*" observe the student carefully because you will be asked to mark the description that best matches the student's response. For example, did the student look at the stacked group of cups, point to them, knock them over, or indicate the group of stacked cups in any way. If not, did the student somehow indicate the separate cups? Remember, students can use any response mode available to them, as long as they indicate their response without your physical support or other kinds of prompts. As you look down the list of possible responses, you'll note that DLM has tried to represent all of the possible ways that a student might respond to the item. Each of the option allows us to capture growth as students move from not responding at all, to attending to the cups when asked a question, to actually making a choice, even if it is the wrong choice. Each of those steps reflects important growth before the student is able to provide the correct response to the item.

Educator Directions:

SHOW: the stacked cups.
SAY: "**Here are some cups.**"

SHOW: the separate cups.
SAY: "**Here are some more cups.**"

SHOW: the stacked cups and the separate cups.
SAY: "**Show me the separate cups.**"

BACK ⊖   EXIT
                DOES
                NOT
                SAVE   NEXT ⊕

For the next item, the teacher presents the group of stacked cups and the separate cups but asks the student to "*Show me the separate cups.*"

Record student response:

- ☐ Indicates the separate cups
- ☐ Indicates the group of stacked cups
- ☐ Indicates one cup or all of the cups
- ☐ Attends to other stimuli
- ☐ No response

BACK ⊕

EXIT
DOES
NOT
SAVE

NEXT ⊕

Again, the teacher then observes the student's response and marks the best description.

Educator Directions:

Present the six erasers to the student in a way that captures the student's attention. For example:

- Draw the student's attention to the presence of the erasers.
- Show how erasers are used.

Once the student has attended to the erasers, stack three erasers in a group and leave three erasers separated. Indicate to the student that the stacked erasers are in a group and the other erasers are separate.

On the next screens, you will ask the student some questions about the erasers.

BACK ⊖

EXIT
DOES
NOT

NEXT ⊕

The teacher repeats the same process using erasers.
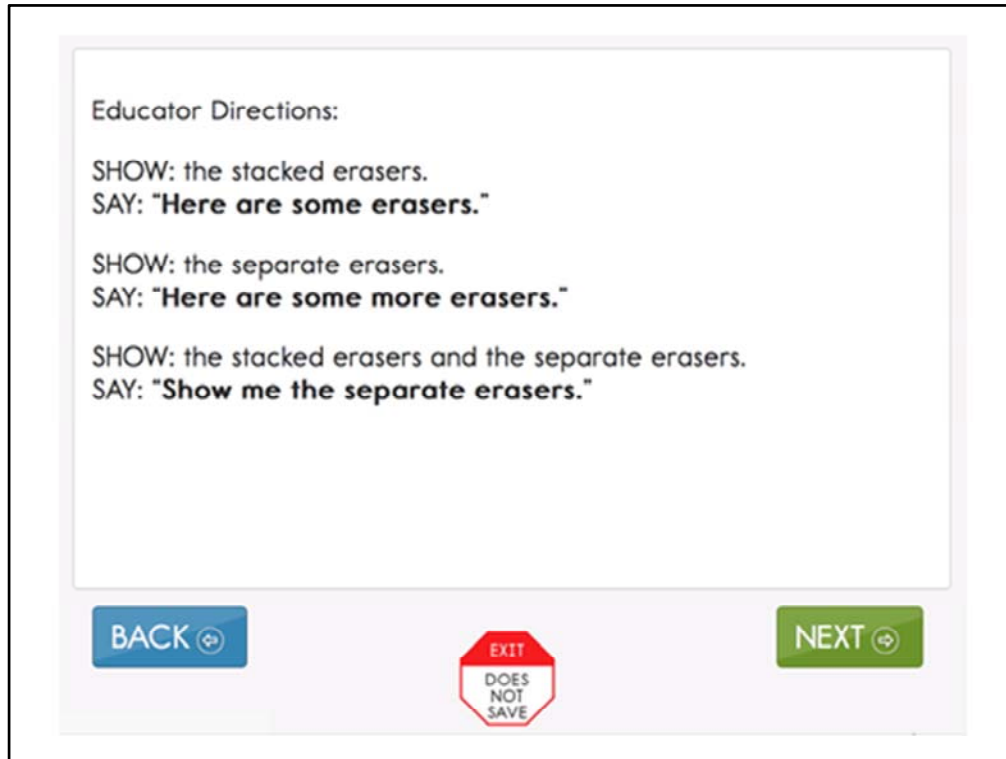
The teacher is guided through presenting the erasers and asking the student to show first the separate erasers,

Record student response:

- ☐ Indicates the separate erasers
- ☐ Indicates the group of stacked erasers
- ☐ Indicates one eraser or all of the erasers
- ☐ Attends to other stimuli
- ☐ No response

BACK ⊙

EXIT
DOES
NOT
SAVE

NEXT ⊙

And record the student's response,

Educator Directions:

SHOW: the stacked erasers.
SAY: "**Here are some erasers.**"

SHOW: the separate erasers.
SAY: "**Here are some more erasers.**"

SHOW: the stacked erasers and the separate erasers.
SAY: "**Show me the group of erasers.**"

BACK ⊕

EXIT
DOES
NOT
SAVE

NEXT ⊕

and then the group of erasers.

Record student response:

☐ Indicates the group of stacked erasers

☐ Indicates the separate erasers

☐ Indicates one eraser or all of the erasers

☐ Attends to other stimuli

☐ No response

BACK ⇐

EXIT
DOES
NOT
SAVE

NEXT ⇒

And once again record the student's response. As you work on teaching students the skills to succeed with items like the cups and eraser items, remember that you want to use lots of different types of objects, and you want to draw student's attention to things that are in a set or separate across their lives. This will improve student performance on the assessment, and it will help students develop the conceptual understanding they need to move closer to the target skill of multiplication.

Now let's look at an example from English language arts. This Essential Element at the 9th - 10th grade level that reads, *Determine how specific claims support the argument made in an informational text.*
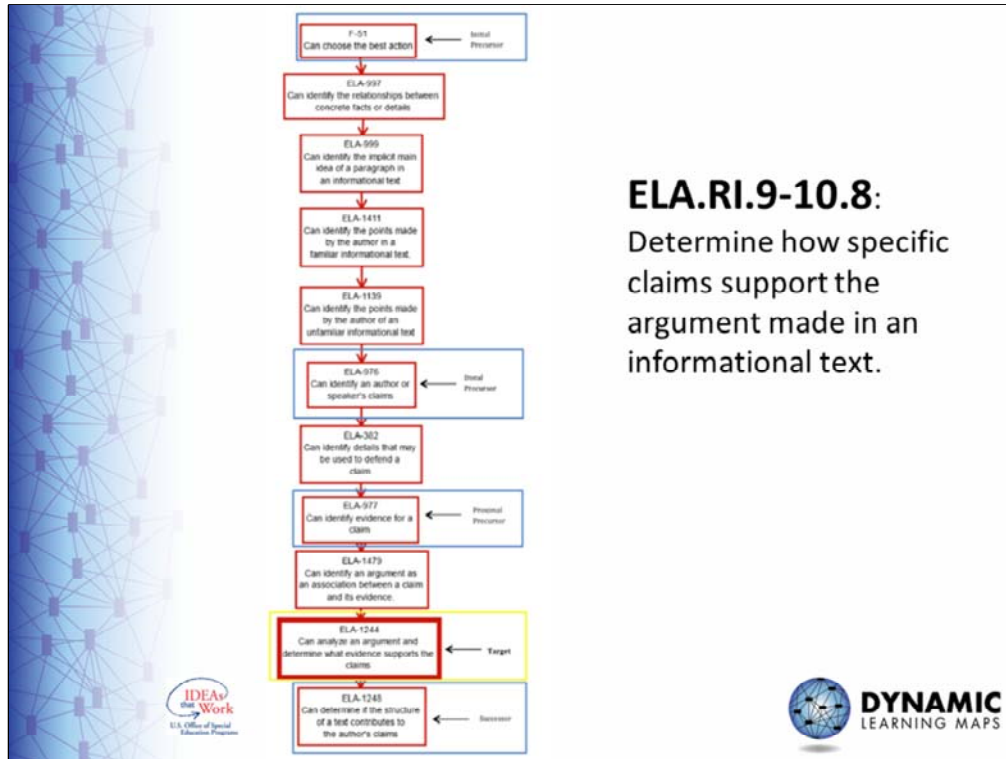
Here is the minimap for the reading Information Essential Element at the 9th-10th grade level.
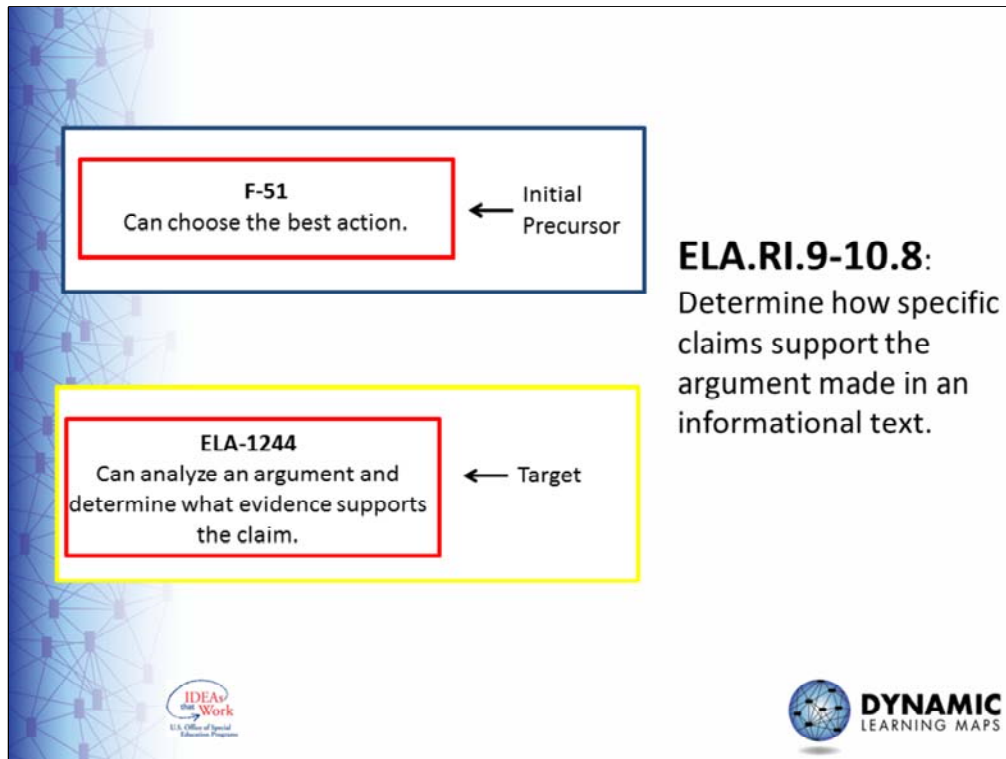
The initial precursor items are going to focus on whether or not students can identify objects that are required for different actions. This relates to the Essential Element because students have to develop basic understandings that things have a purpose in order to eventually understand that claims serve the purpose of supporting an argument.
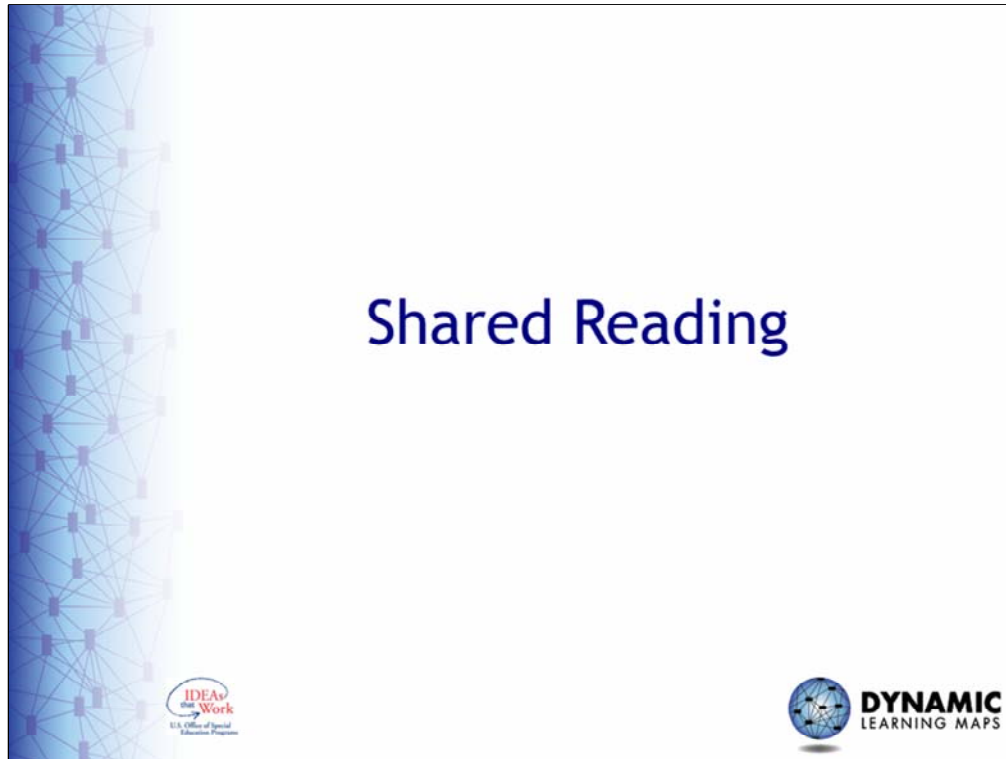
As mentioned earlier, initial precursor items in English language arts are presented in the context of shared reading. In initial precursor items, this means that teachers and students begin each English language arts assessment session by reading a book together. During this shared reading, the teacher is trying to maximize student engagement and interaction, using objects and symbols to attract and sustain student attention.
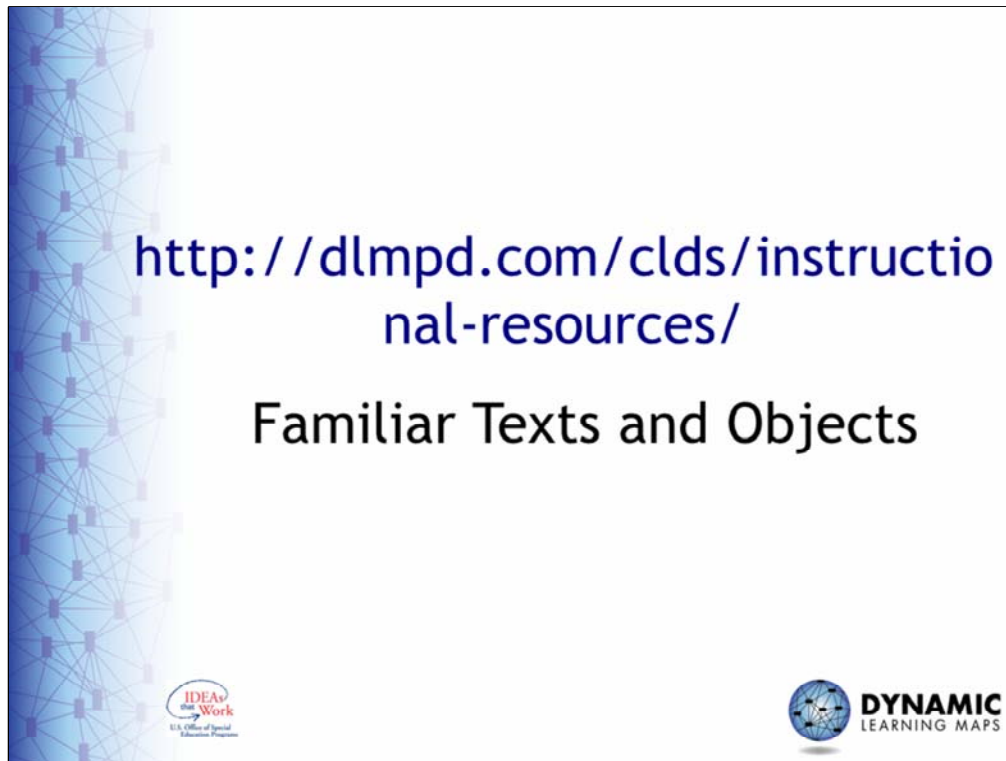
It is expected that students taking initial precursor items will be familiar with the text before they begin the assessment. Electronic, switch-accessible versions of all of the texts used in the initial precursor items are available for free. You can find them listed on the instructional resources page of the DLM virtual community of practice at http://dlmpd.com/clds/instructional-resources.

The DLM virtual community of practice also provides a list of specific objects that are used in the initial precursor items in ELA. For example, in the set of initial precursor items we're about to explore, the site tells the teacher that the testlet with the book *Friends are Great* uses the following objects: 1 object that is needed to study, 1 object that is needed to eat, 1 object that is needed to play games, and 3 objects that are unrelated to studying, eating, and playing games. These unrelated items will serve as distractor objects or incorrect options during the assessment.
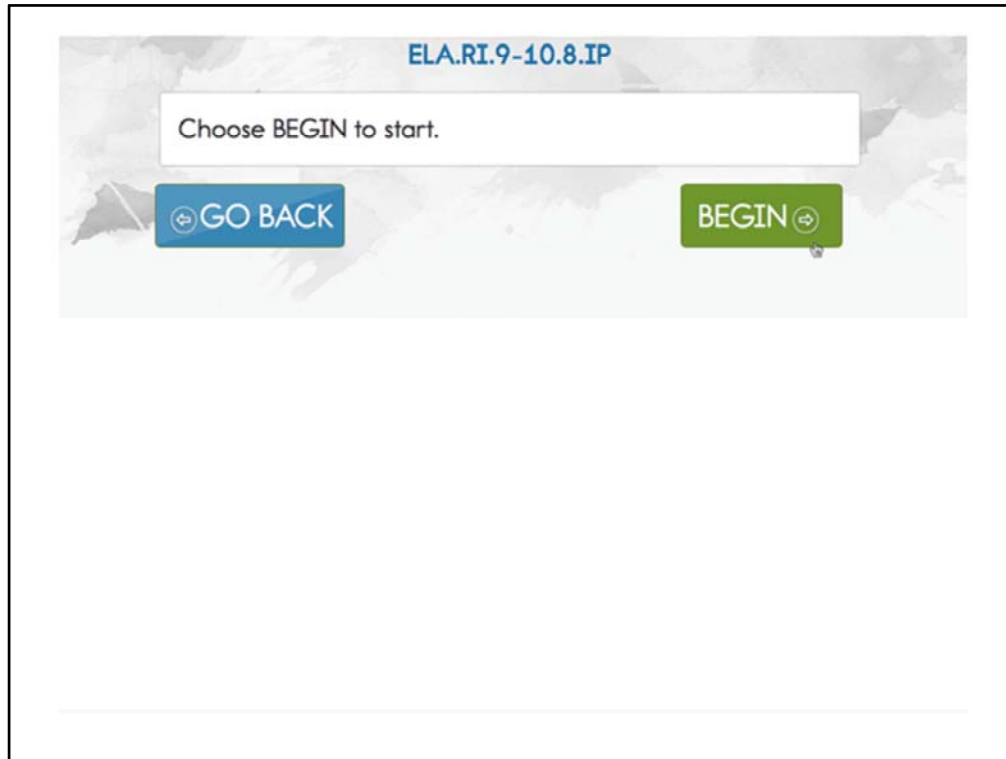
Let's explore an initial precursor testlet in English language arts.
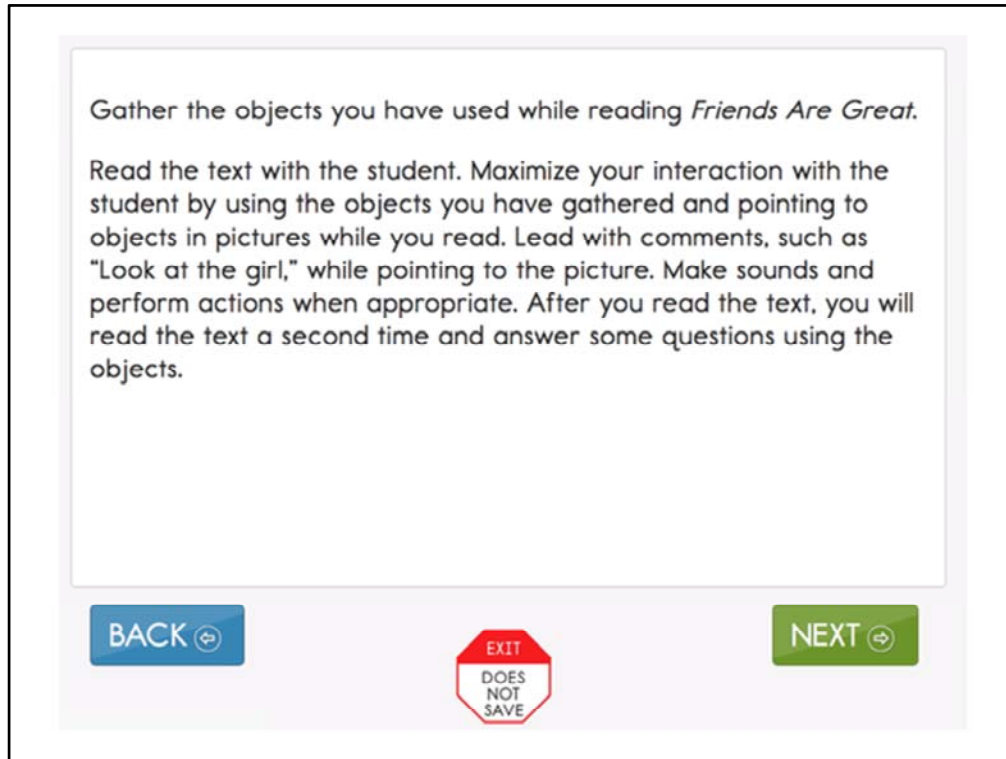
As with math, the first screen provides educator directions. These directions say, "*Gather the objects you have used while reading <u>Friends are Great</u>. Read the text with the student. Maximize your interactions with the student by using the objects you have gathered and pointing to objects in pictures while you read. Lead with comments, such as, "look at the girl," while pointing to the picture. Make sounds and perform actions when appropriate. After you read the text, you will read the text a second time and answer some questions using the objects.*"
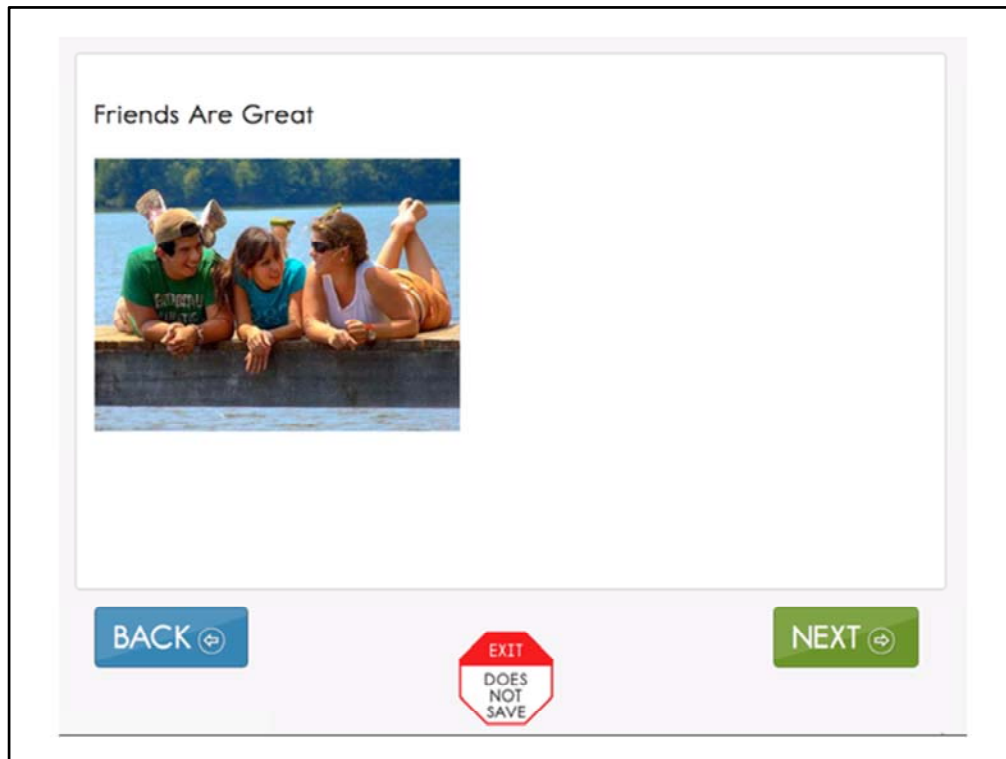
And then you read the text together.

Friends are great.

Friends help each other.

Friends can help each other study for school.

Friends can help each other make something new.

Friends spend time together.

Friends can spend time together eating lunch.

Friends can spend time together playing games.

Friends talk to each other.

Friends can talk about their day.

Friends can talk about their plans.

Friends can make each other feel better when they are sad.
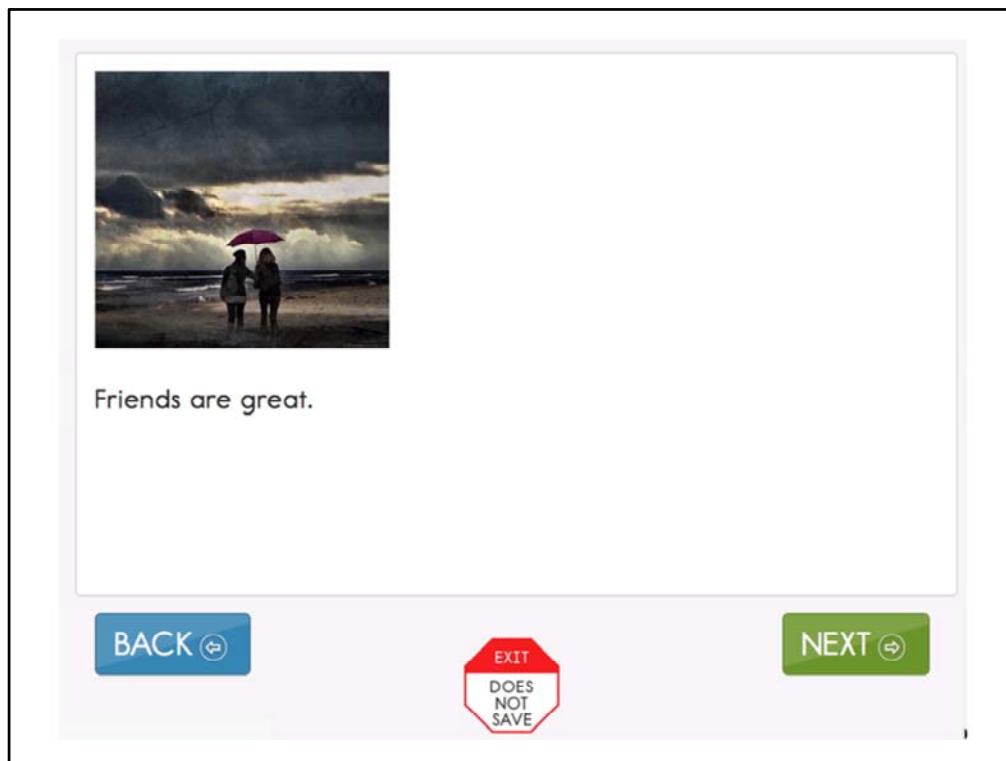
Friends are great.

Make a new friend.

This is the end of the text. Now, read the text again and answer some questions. Because this testlet addresses foundational skills, the questions focus on the student's ability to choose the best action.

BACK ⇐   EXIT DOES NOT SAVE   NEXT ⇒
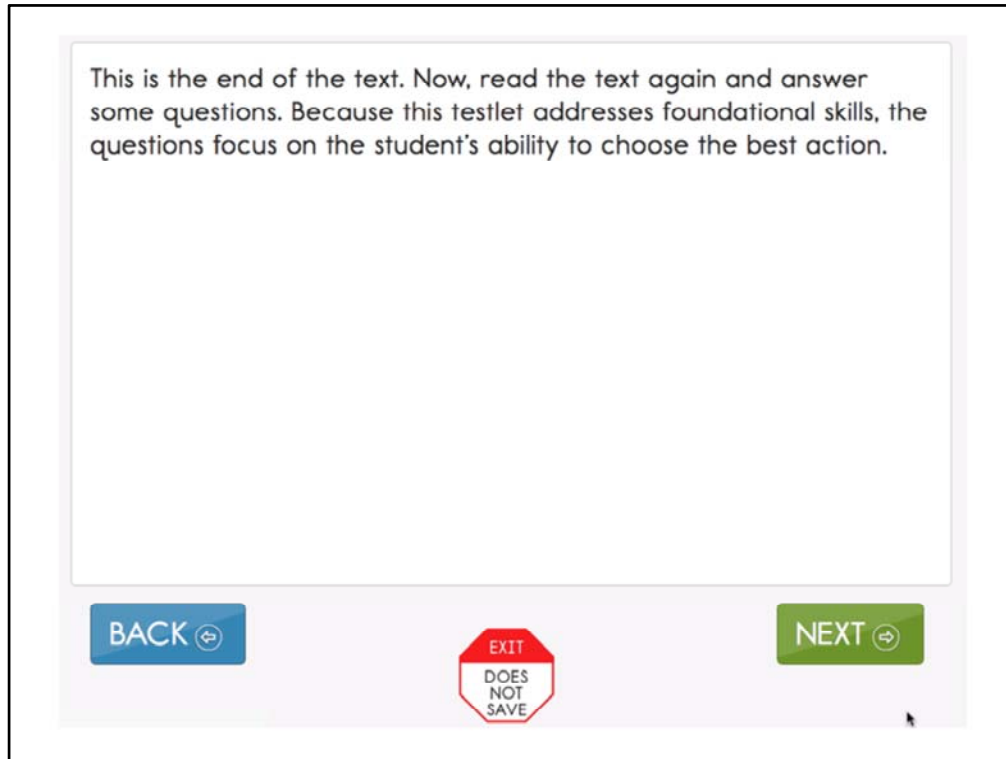
After reading the text once, then the teacher is reminded, "*This is the end of the text. Now, read the text again and answer some questions. Because this testlet addresses foundational skills, the questions focus on the student's ability to choose the best action.*" This statement is intended to emphasize the fact that the questions at the initial precursor level are not traditional text comprehension questions. Instead, the book provides a way to assess foundational skills in a meaningful, language-rich context rather than in isolation.
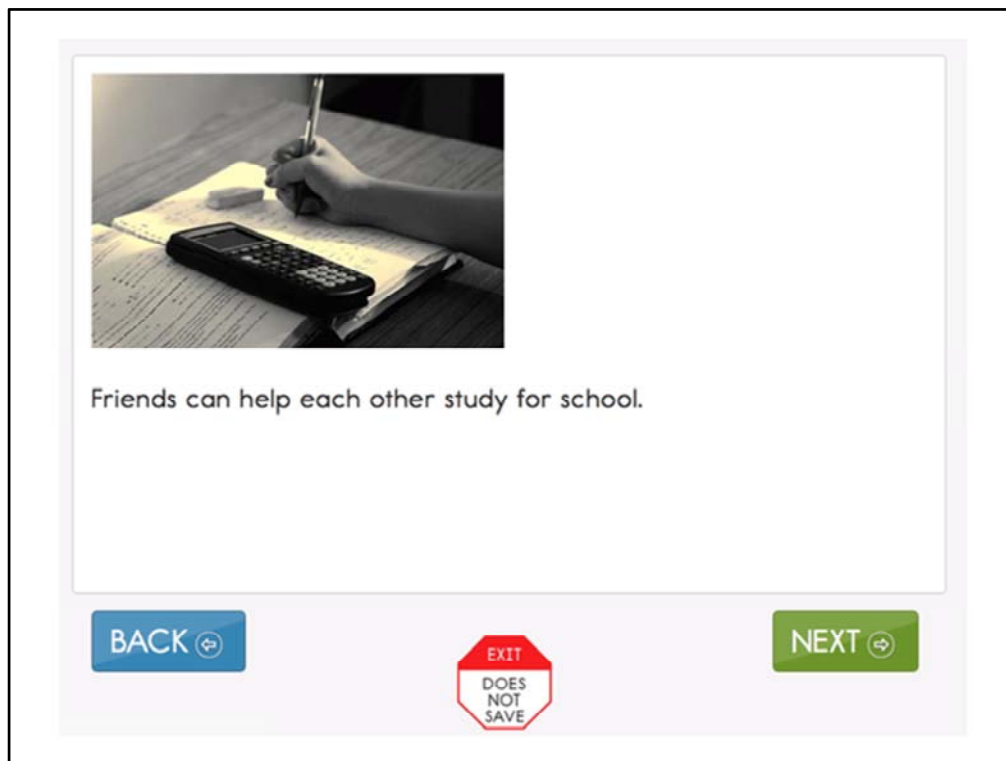
During the 2nd reading of the book, there are items embedded during the text. The first comes after the page that reads, "Friends can help each other study for school."

Educator Directions:

SHOW: one object that is used to study.
SHOW: another object that is unrelated to studying.
SAY: **"Which do you use to study?"**
[You may substitute another activity and object as required.]

☐ Indicates the needed object

☐ Indicates the unrelated object

☐ Indicates both objects

☐ Attends to other stimuli

☐ No response

BACK ⊙

EXIT
DOES
NOT
SAVE

NEXT ⊙

The DLM™ system tells the teacher to show one object that is used to study and then show another object unrelated to studying. Then, the educator is directed to say, "Which do you use to study?"

In this picture, you see the student is being presented with a book, the object the teacher has been using as something that is needed to study, and a monkey toy. When the teacher asked, "Which do you use to study?" The student looked right at the book.

Educator Directions:

SHOW: one object that is used to study.
SHOW: another object that is unrelated to studying.
SAY: **"Which do you use to study?"**
[You may substitute another activity and object as required.]

☐ Indicates the needed object

☐ Indicates the unrelated object

☐ Indicates both objects

☐ Attends to other stimuli

☐ No response

BACK ⊜   EXIT DOES NOT SAVE   NEXT ⊛

Having observed the student looking directly at the book, the teacher checks the box next to the statement that reads, "Indicates the needed object."

The next item is embedded in the book after the page that reads, "Friends can spend time eating lunch."

Educator Directions:

SHOW: one object that is needed for eating.
SHOW: another object that is unrelated to eating.
SAY: **"Which do you use to eat?"**
[You may substitute another activity and object as required.]

Record student response:

□ Indicates the needed object

□ Indicates the unrelated object

□ Indicates both objects

□ Attends to other stimuli

□ No response

BACK ⟲   EXIT DOES NOT SAVE   NEXT ⟳

The DLM™ system tells the teacher to show one object that is used to eat and then show another object unrelated to eating. Then, the educator is directed to say, "Which do you use to eat?"

In this picture, you see the student is being presented with a spoon, the object the teacher has been using as something that is needed to eat, and some nail polish. When the teacher asked, "Which do you use to eat?" The student looked right at the nail polish and reached out to touch it.

Educator Directions:

SHOW: one object that is needed for eating.
SHOW: another object that is unrelated to eating.
SAY: **"Which do you use to eat?"**
[You may substitute another activity and object as required.]
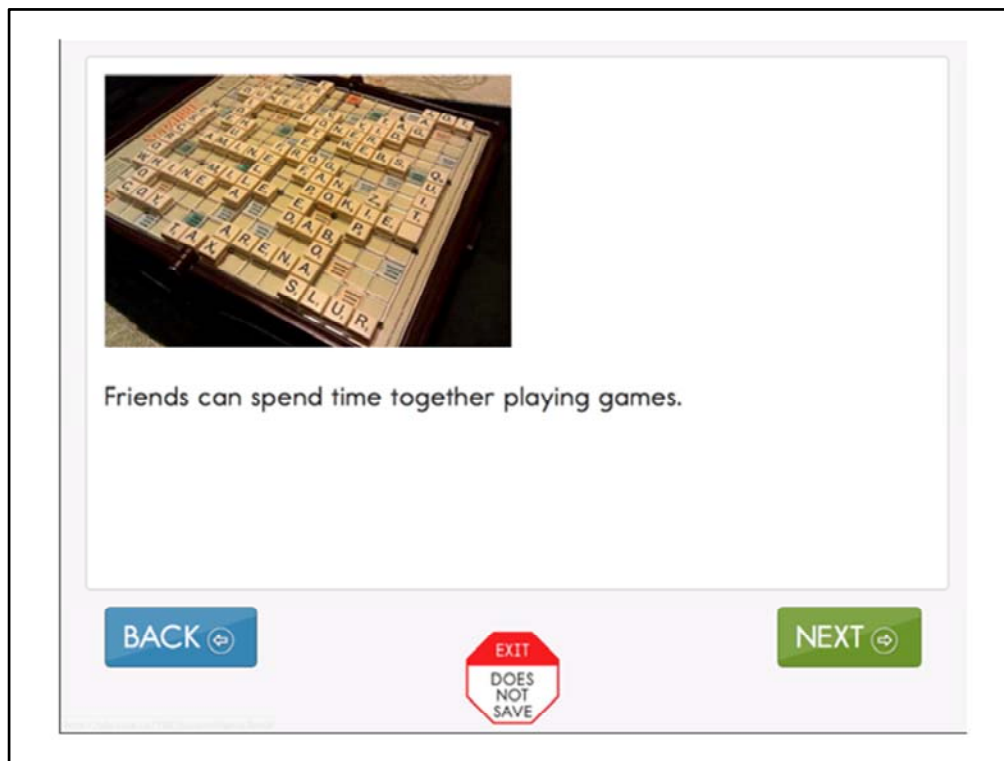
Record student response:

- ☐ Indicates the needed object
- ☐ Indicates the unrelated object
- ☐ Indicates both objects
- ☐ Attends to other stimuli
- ☐ No response

BACK ⬅

EXIT
DOES
NOT
SAVE

NEXT ➡

Having observed the student looking directly at and reaching out for the nail polish, the teacher checks the box next to the statement that reads, "Indicates the unrelated object." The teacher also made a mental note not to use an item like pink nail polish that may be more interesting than attending to or attempting to answer the question about eating.

The final item embedded in this book comes after the page that reads, "Friends can spend time together playing games."

Educator Directions:

SHOW: one object that is needed to play games.
SHOW: another object that is unrelated to playing games.
SAY: **"Which do you use to play games?"**
[You may substitute another activity and object as required.]

Record student response:

- □ Indicates the needed object

- □ Indicates the unrelated object

- □ Indicates both objects

- □ Attends to other stimuli

- □ No response

BACK ⬅

EXIT
DOES
NOT

NEXT ➡

The DLM™ system tells the teacher to show one object that is used to play games and then show another object unrelated to playing games. Then, the educator is directed to say, "Which do you use to play games?"

In this picture, you see the student is being presented with the monkey, the object the teacher has been using as something that is needed to play games, and the book. When the teacher asked, "Which do you use to play games?" The student looked right at the monkey and reached out to touch it.

Educator Directions:

SHOW: one object that is needed to play games.
SHOW: another object that is unrelated to playing games.
SAY: **"Which do you use to play games?"**
[You may substitute another activity and object as required.]

Record student response:

☐ Indicates the needed object

☐ Indicates the unrelated object

☐ Indicates both objects

☐ Attends to other stimuli

☐ No response

BACK ⬅

EXIT
DOES
NOT

NEXT ➡

Having observed the student looking directly at and reaching out for the monkey, the teacher checks the box next to the statement that reads, "Indicates the needed object."

The initial precursor items in DLM™ are unique. They require teachers to be thoughtful observers of student behavior and to be in tune with their students and they way their students attempt to communicate. They also require teachers to make thoughtful decisions about the kind of objects they select, as the teacher here learned with the pink nail polish, and to use those objects and others during repeated interactions focused on the skills to be developed.

To learn more about the Dynamic Learning Maps Alternate Assessment Consortium and the Alternate Assessment System, please go to www.dynamiclearningmaps.org.