


ND Alternate Assessment

ND Special Education
Summer Institute 2019

DYNAMIC® LEARNING MAPS

Topics Covered

- Updated assessment window
- Purpose of instructionally embedded assessments
- DLM® Blueprints
- Overview of the new instructional planner
- ND Science for 2019-20

UPDATED DLM ALTERNATE ASSESSMENT

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Why is the Assessment Changing?

- Consortium states that use the current testing model decided to transition to two instructionally embedded assessment windows to be consistent with the original intent of the DLM system.
  - Practice of integrated student-centered instruction and assessment throughout the school year
  - Following instruction and assessment, teachers use assessment results to guide next steps in instruction
- Transition will begin in the fall of 2019.

Basics of the Updated DLM Alternate Assessment

- Two equally long instructionally embedded assessment windows, spanning full academic year
  - fall window
  - spring window
- Both windows have requirements identical to the current instructionally embedded assessment window

Goals of Two Instructionally Embedded Assessment Windows

- Provide more accurate representation of what students with the most significant cognitive disabilities know and can do by measuring their learning as instruction occurs throughout the year.
- Support connections to instructional practices by spanning full academic year.
- Support teacher flexibility and decision-making within blueprint requirements for coverage.

Goals of Two Instructionally Embedded Assessment Windows (cont.)

- Integrate instruction and assessment to inform one another.
- Provide instruction and assessment that align to academic goals for students with the most significant cognitive disabilities.

Key Benefits of Two Instructionally Embedded Assessment Windows

- Instruction and assessment occur throughout both windows, and span the full year.
- Assessment results can inform instructional decision-making rather than merely fulfilling legislative mandate.

Key Benefits (cont.)

- Precision of measurement is increased when students are assessed on the same Essential Elements in each window.
- Students are assessed on the full blueprint in each window, providing more opportunities for them to demonstrate what they know and can do.

COMPARISON OF CURRENT AND UPDATED DLM ALTERNATE ASSESSMENT

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WHAT STAYS THE SAME?

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What Must Be Done Prior to Assessment Stays the Same

- Before creating students' instructional plans
  - Students must be rostered to the test administrator.
  - Test administrators must complete the Required Test Administrator Training.
  - Test administrators must complete and submit the First Contact survey for each student.
  - Test administrators must select Personal Needs and Preferences (PNP) Profile settings for each student.

Blueprints Stay the Same

- Blueprints remain the same.
  - No Essential Elements change for any grade.
  - No criterion in the claims and conceptual areas change.
- Teachers continue to have a wide breadth of Essential Elements from which to choose in English language arts and mathematics.

Scoring Model Stays the Same

- All student responses from both windows are included in summative reporting.
- No changes will be made to performance level calculations or cut points.
- The structure of Individual Student Score Reports will be the same as in the current DLM alternate assessment.

What Else Stays the Same?

- Test delivery remains in Student Portal.
- The average time to complete each testlet remains the same (about 5–15 minutes, depending on subject and the student).
- Teachers can choose to exceed requirements or retest Essential Elements or linkage levels based on individual student goals.

WHAT IS DIFFERENT?

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What Are the Main Differences?

- Both assessment windows will involve instructionally embedded assessments.
- Fall window: **Sept. 9, 2019** to Dec. 20, 2019.
  - A bit shorter
  - Opens and closes earlier
- Spring window: **Feb. 3, 2020** to May 15, 2020.
  - A bit longer
  - Testlets now instructionally embedded

What's the Impact of the Spring Window Also Being Instructionally Embedded?

In the updated DLM alternate assessment during the spring window

- A few additional testlets are needed in each grade for ELA and mathematics.
  - The longer spring window provides more time to cover all blueprint requirements.
- Teachers must create instructional plans.
- Teachers can choose to cover the same or different Essential Elements to meet blueprint coverage requirements in each window.

Advantages of Choosing the Same Essential Elements in Both Windows

- Instruction on each particular Essential Element can be more developed and expanded.
  - More depth of instruction
- Student changes and growth will be more evident.
  - Precision of measurement when students are assessed on the same Essential Element in each window
- The Student Learning Profile will have more data to inform it.

Number of Testlets Comparison

- When comparing the current spring assessment window with the updated spring window, a few additional testlets are to be delivered, which will take very little additional time.
- The following slide compares the number of testlets delivered in these two windows.

Grade	ELA			Mathematics			Total increase in testlets for *both* subjects during updated spring window	Total increase in minutes testing for *both* subjects during updated spring window
	Current TOTAL testlets both windows	Updated TOTAL testlets both windows	Total increase in testlets from current to updated windows	Current TOTAL testlets both windows	Updated TOTAL testlets both windows	Total increase in testlets from current to updated windows		
3	12	14	+2	11	12	+1	+3	≈15 min
4	12	14	+2	13	16	+3	+5	≈25 min
5	12	14	+2	12	14	+2	+4	≈20 min
6	12	14	+2	11	12	+1	+3	≈15 min
7	12	14	+2	12	14	+2	+4	≈20 min
8	12	14	+2	12	14	+2	+4	≈20 min
9	10	10	0	11	12	+1	+1	≈5 min
10	10	10	0	11	12	+1	+1	≈5 min
11	10	10	0	11	12	+1	+1	≈5 min

Window Comparison

Current Fall Instructionally Embedded Assessment Window	Updated Fall Assessment Window	Current Spring Assessment Window	Updated Spring Assessment Window
09/19/2018 – 02/27/2019 System closed for maintenance 12/19/18 – 01/02/19	**09/09/2019** – 12/20/2019	03/11/2019 – 06/07/2019	**02/03/2020** – 05/15/2020
106 Weekdays	75 Weekdays	65 Weekdays	76 Weekdays

- The number of days available for assessment in each window are weekdays only and do not exclude any potential holidays.

What Else is Different?

- Braille testlets will be available in both instructionally embedded assessment windows.
  - Available in UEB
  - In current DLM alternate assessment, braille available only in spring window

RECAP

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Recap What Does Not Change with the Updated DLM Assessment

- Completion of Required Test Administrator Training, First Contact survey, and Personal Needs and Preferences (PNP) Profile remains the same.
- Scoring model remains the same.
  - All responses from entire academic year are included in the Individual Student Score Report for ELA and mathematics.
- Test delivery in Student Portal remains the same.
  - Testlets typically take 5-15 minutes depending on subject and student.

Recap What Does Change with the Updated DLM Assessment

- Both assessment windows are about the same length.
  - Each window covers about half a year.
- In BOTH windows, teachers create instructional plans, choose Essential Elements and linkage levels, and administer assessments following instruction.
- Requirements for blueprint coverage in both windows.
  - Meeting blueprint requirements twice means a few more total testlets.
  - Students complete approximately 6-9 testlets per subject in both the fall window and the spring window.
- An At-A-Glance summary PDF is available.

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PURPOSE OF INSTRUCTIONALLY EMBEDDED ASSESSMENTS

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Instructionally Embedded Assessments

- Integrate instruction with assessment seamlessly
- Are based on the student's academic goals
- Administered throughout the school year

Teacher Choice and Flexibility

- Instructionally Embedded alternate assessment allows teachers to choose
  - Essential Elements for instruction based on blueprint guidelines
  - Linkage level for each testlet based on student needs
    - Kite® system will suggest a linkage level, but the teacher can select a different level if desired
- When to assess each student based on instruction and assessment window timeframes

Instructionally Embedded Assessments

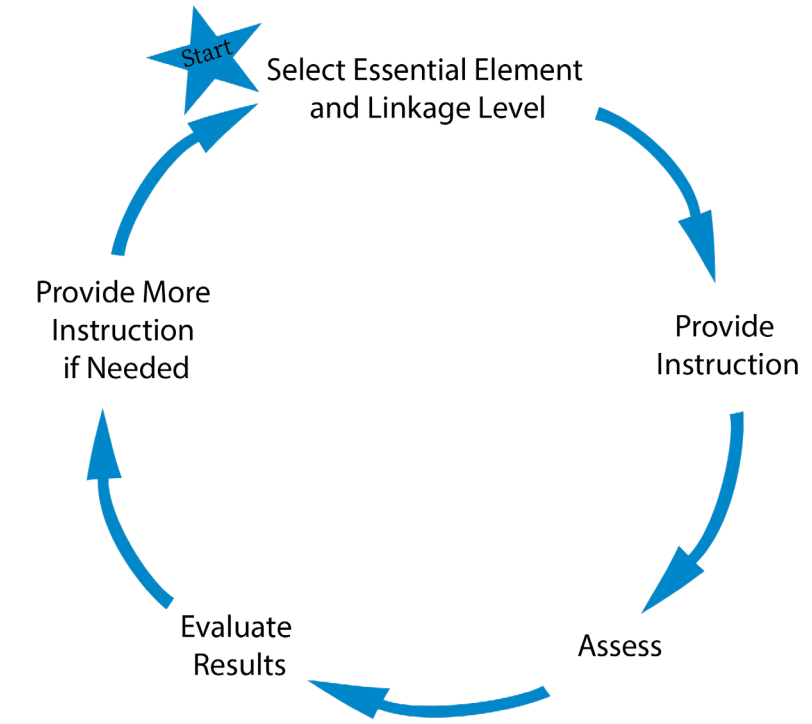
- Are taken any time during the window when a student is prepared, based on the teacher-provided instruction
- Are an individual assessment—not a group assessment where the class takes the same test at the same time
- Are not to be administered in a bunch at the end of a window, where all testlets are taken in a short time

Using Instructionally Embedded Assessments

- Identify student's knowledge, skills, and understanding relative to grade-level targets
- Utilize student progress reports to
  - Evaluate if additional instruction is needed
  - Determine the student is ready to move on to another linkage level or Essential Element

Instruction and Assessment Cycle

- To best meet the intent of the Instructionally Embedded assessment, instruction and assessment follow a cycle.



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DLM BLUEPRINTS

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DLM ELA and Mathematics Blueprint

- Is a list of Essential Elements in each claim and conceptual area available for instruction and assessment
- Includes the criterion for Essential Element selection to meet assessment requirements

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DLM ELA Blueprint Example

- The grade 4 ELA requirement for conceptual area C1.1 would be for the test administrator to choose at least three Essential Elements, including at least one Reading Literature (RL) and one Reading Informational (RI).

Grade 4: Available Essential Elements and minimum expectation for each student's assessment

Conceptual Area	Essential Element	Description*
ELA.C1.1	**Requirement: Choose at least three Essential Elements in C1.1, including at least one RL and one RI.**	
	EE.RL.4.1	Use details from the text to recount what the text says.
	EE.RL.4.3	Use details from the text to describe characters in the story.
	EE.RL.4.5	Identify elements that are characteristic of stories.
	EE.RI.4.1	Identify explicit details in an informational text.
	EE.RI.4.2	Identify the main idea of a text when it is explicitly stated.
	EE.RI.4.3	Identify an explicit detail that is related to an individual, event, or idea in a historical, scientific, or technical text.
	EE.RI.4.5	Identify elements that are characteristic of informational texts.

DLM ELA Blueprint Example

- The first Essential Element for grade 4 in that conceptual area is EE.RL.4.1 “Use details from the text to recount what the text says.”

Grade 4: Available Essential Elements and minimum expectation for each student’s assessment

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	EE.RI.4.5	Identify elements that are characteristic of informational texts.

Criterion

- The criterion lists the number and type of Essential Elements that are required to be selected for testing for each claim or conceptual area for a subject and grade to meet blueprint requirements.
- The teacher has freedom to choose the Essential Elements that best align to each student's academic goals as long as the criterion is met.

Linkage Levels within Essential Elements

Essential Element

- After selecting an Essential Element, the linkage level is selected for instruction and assessment.

ELA.EE.RL.4.1
Use details from the text to recount what the text says

Linkage Levels

Initial Precursor:
- Can recognize when he or she encounters familiar people, objects, places, and events

Distal Precursor:
- Can identify the behavior and actions of specific characters in a familiar story

Proximal Precursor:
- Student can identify the explicitly-stated actions of characters in a story

Target:
- Student can recount events from a narrative using details. They may not be able to provide a complete summary or tell the details in temporal order but the details are accurate

Successor:
- Can recount key details of a story

ELA and Mathematics Blueprint Requirements

For each grade and subject area

- A list of available Essential Elements for each claim or conceptual area is provided.
- The Essential Element selection requirements for each claim or conceptual are delineated.
- The teacher has freedom to choose the Essential Elements that best align to each student's academic goals as long as the requirement is met.

USING THE INSTRUCTION AND ASSESSMENT PLANNER

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Enter the Instruction and Assessment Planner

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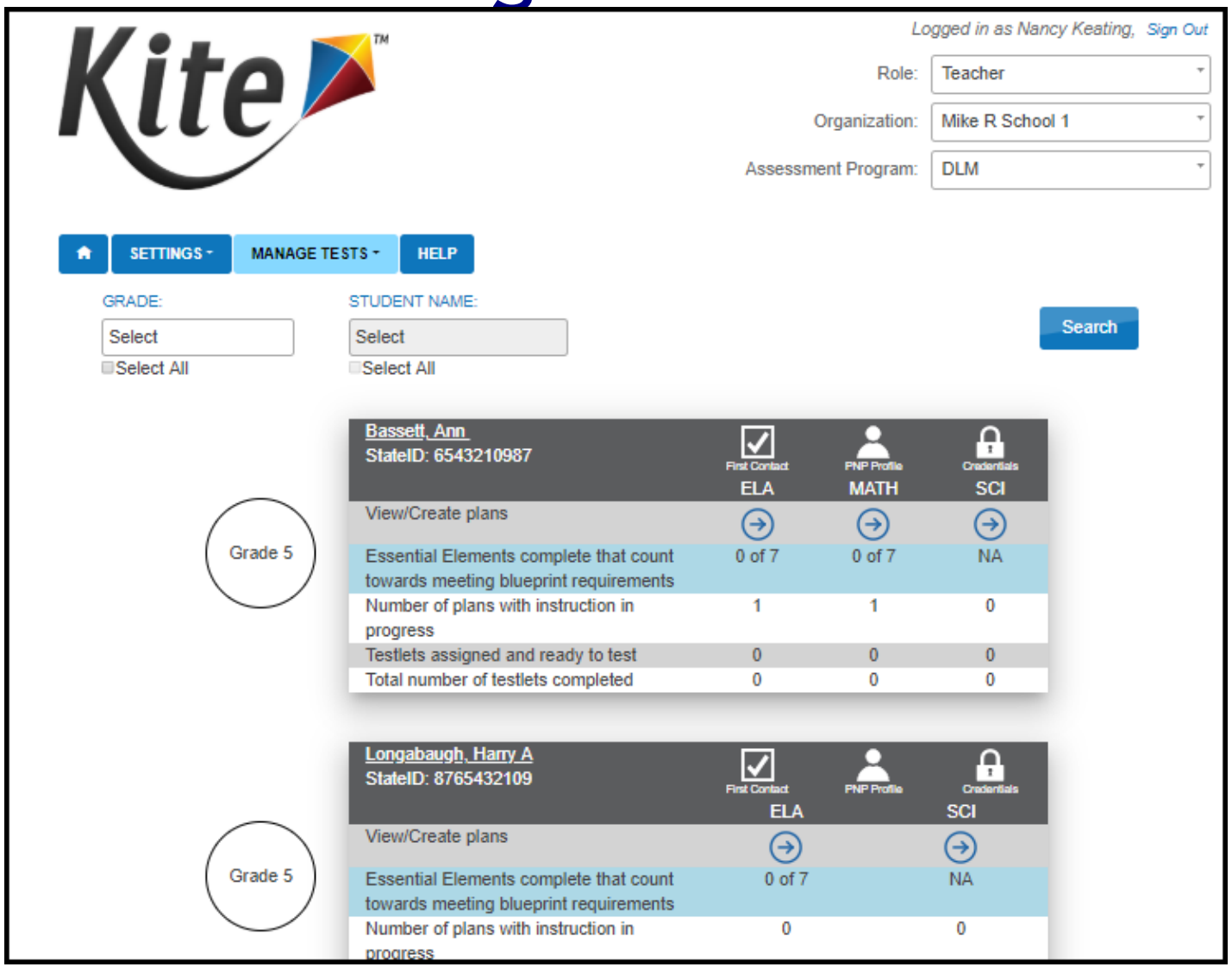
Instruction and Assessment Planner: Entering the Planner



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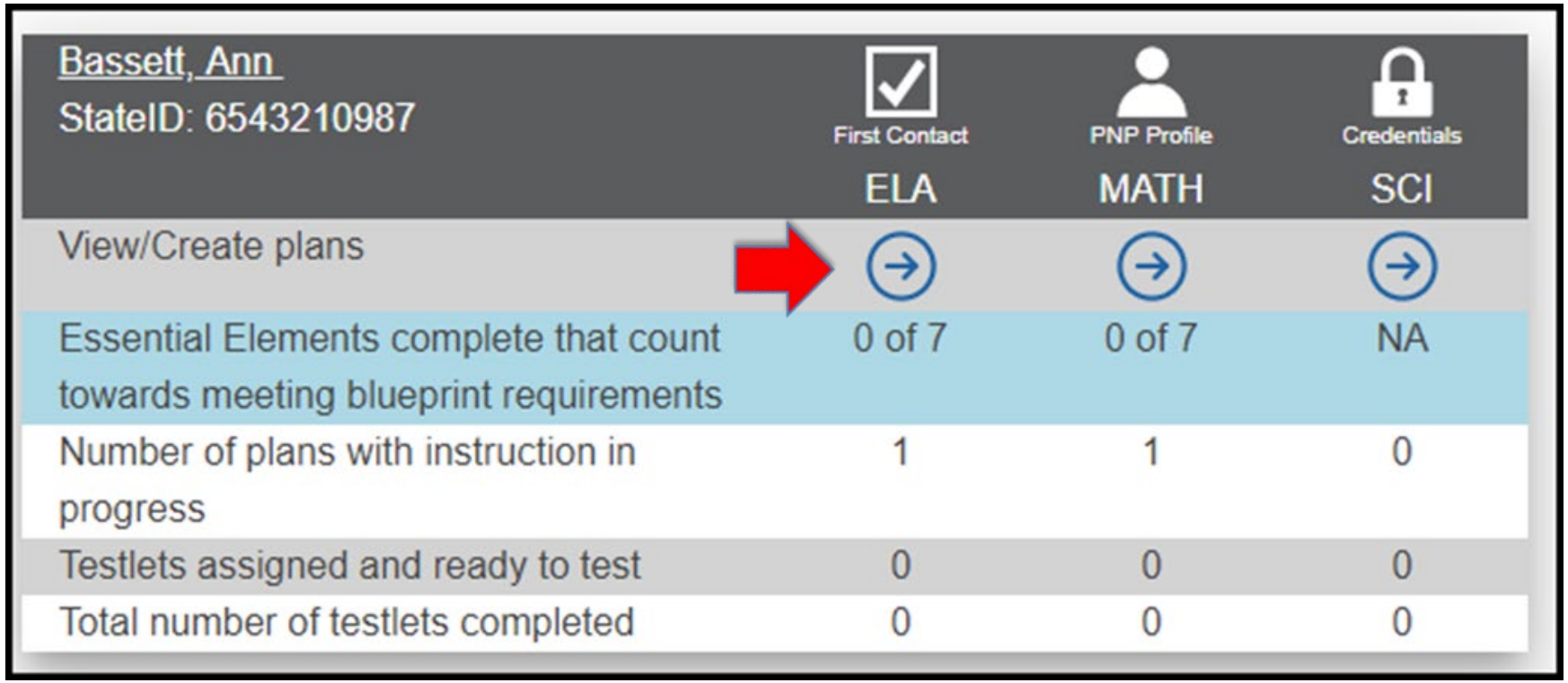
Instruction and Assessment Planner

- Student Activity Table
  - Dashboard for each student's instructionally embedded testing activity
  - Information includes
    - Essential Elements completed that count towards meeting blueprint requirements
    - Number of plans with instruction in progress
    - Testlets assigned and ready to test
    - Total number of testlets completed

Instruction and Assessment Planner: Navigate to Student View Page



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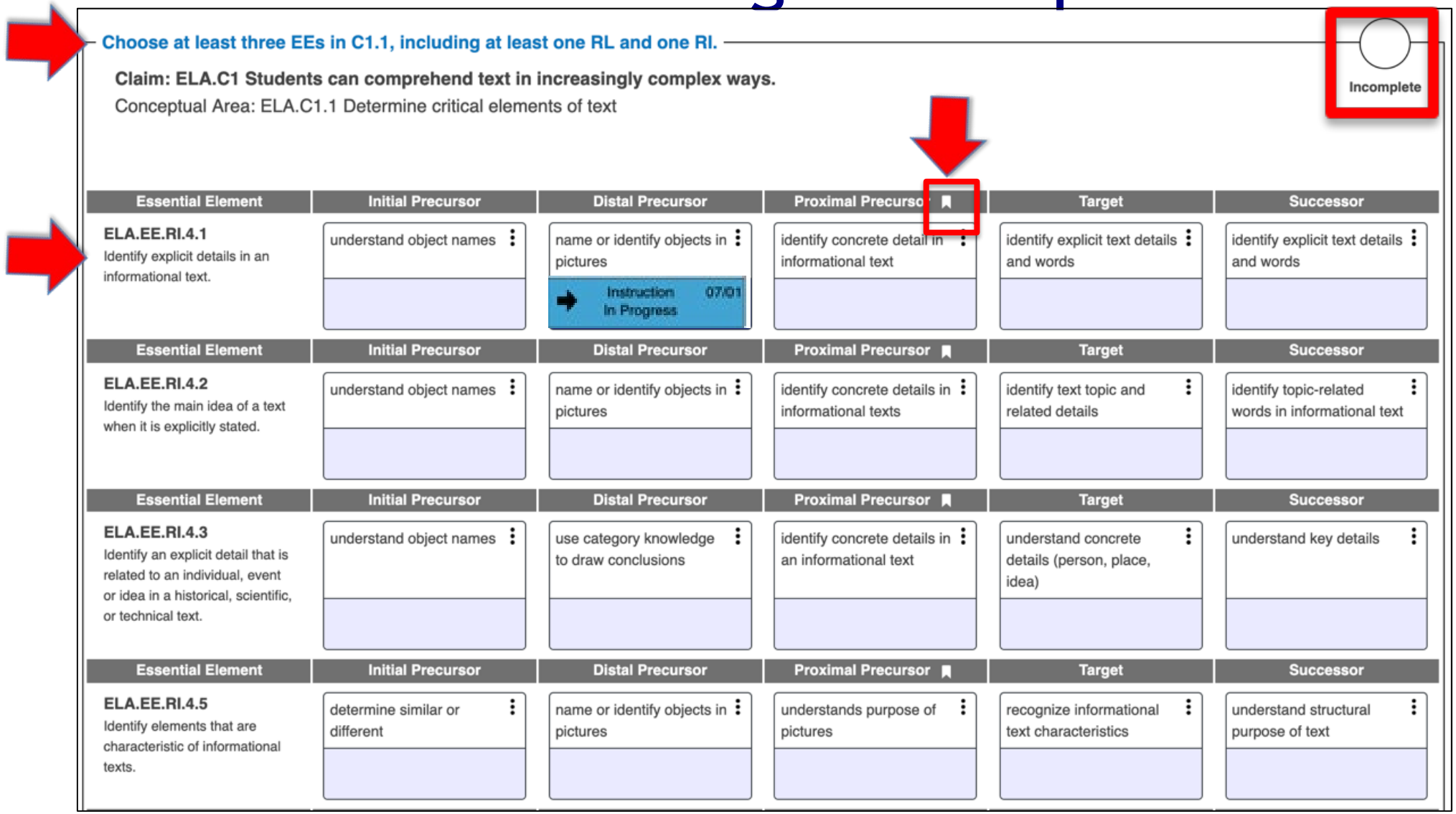
Instruction and Assessment Planner: Student View Page – Blueprint



Choose at least three EEs in C1.1, including at least one RL and one RI.

Incomplete

Claim: ELA.C1 Students can comprehend text in increasingly complex ways.

Conceptual Area: ELA.C1.1 Determine critical elements of text

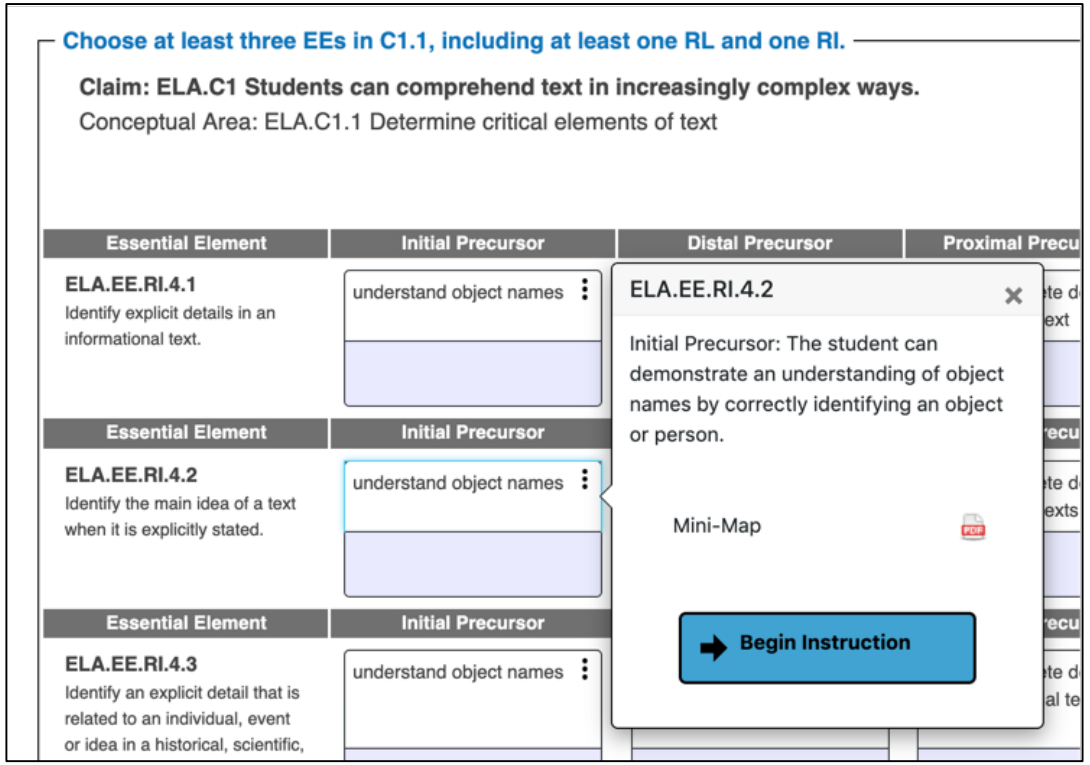
Essential Element	Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
ELA.EE.RI.4.1 Identify explicit details in an informational text.	understand object names	name or identify objects in pictures Instruction In Progress 07/01	identify concrete detail in informational text	identify explicit text details and words	identify explicit text details and words
ELA.EE.RI.4.2 Identify the main idea of a text when it is explicitly stated.	understand object names	name or identify objects in pictures	identify concrete details in informational texts	identify text topic and related details	identify topic-related words in informational text
ELA.EE.RI.4.3 Identify an explicit detail that is related to an individual, event or idea in a historical, scientific, or technical text.	understand object names	use category knowledge to draw conclusions	identify concrete details in an informational text	understand concrete details (person, place, idea)	understand key details
ELA.EE.RI.4.5 Identify elements that are characteristic of informational texts.	determine similar or different	name or identify objects in pictures	understands purpose of pictures	recognize informational text characteristics	understand structural purpose of text

Instruction and Assessment Planner: Student View Page

- **Blueprint Requirements -** Blueprint view of student activity for the subject
  - Grouped by requirement, and includes status for each requirement.
  - Within each requirement, includes status for each Essential Element and linkage level.

Instruction and Assessment Planner: Process

1. Select an Essential Element Linkage Level card.
2. Select the **Begin Instruction** button.



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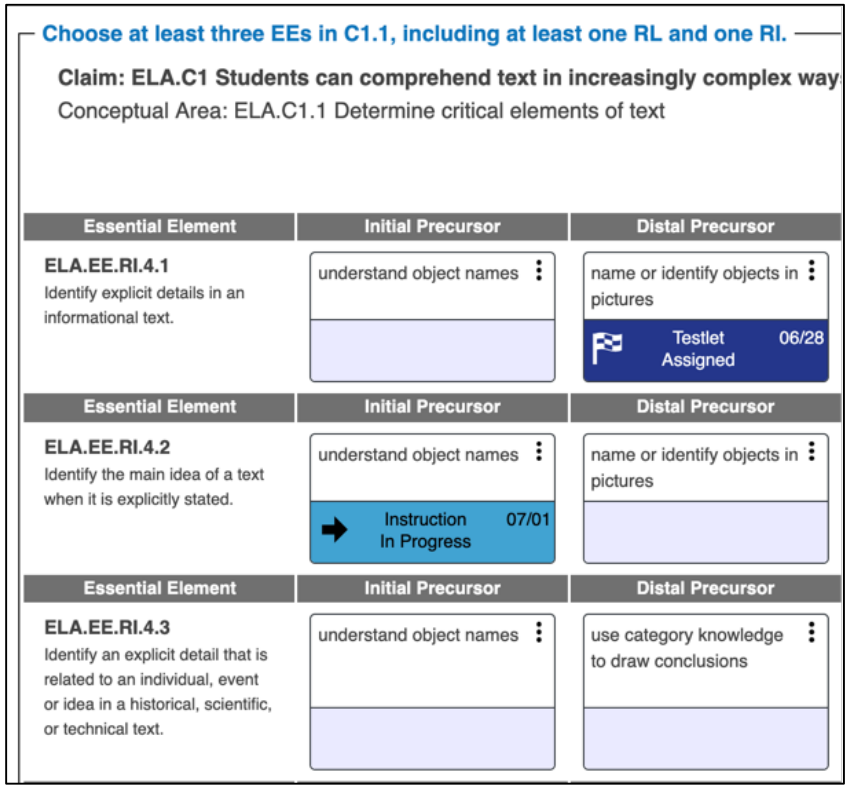
Instruction and Assessment Planner: Process

3. Instruction for the Essential Element and linkage level is indicated as In Progress.



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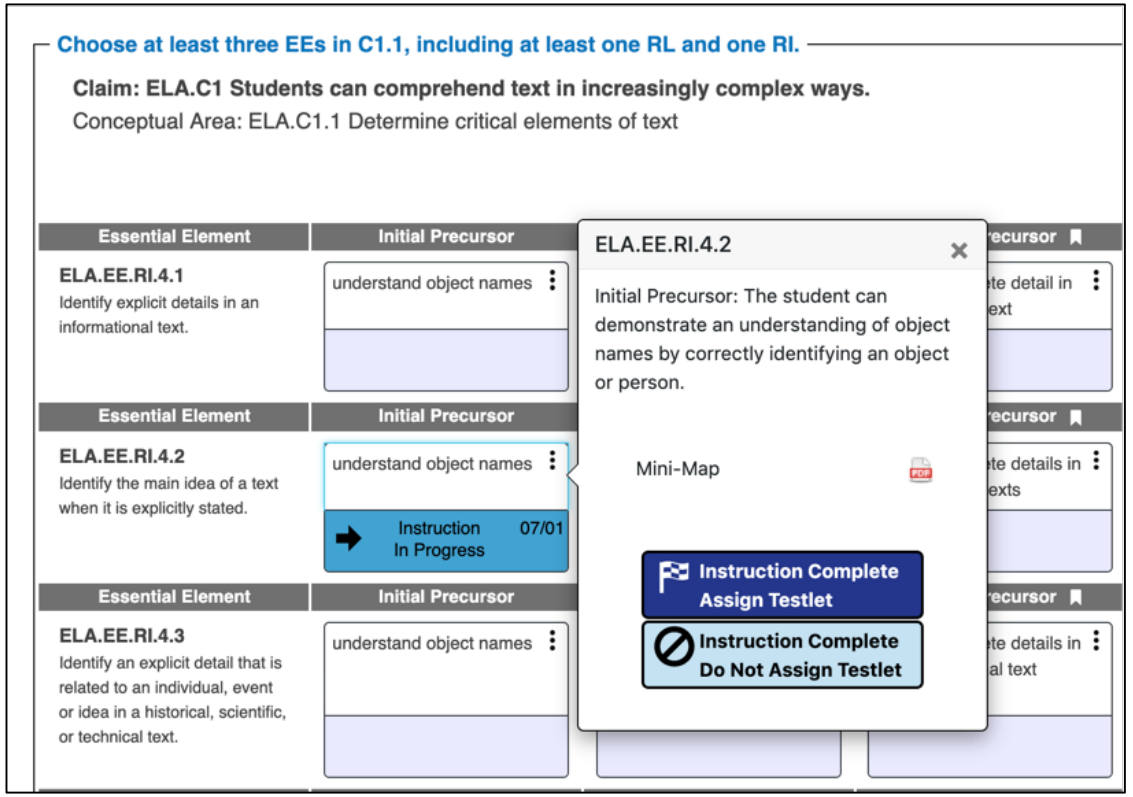
Instruction and Assessment Planner: Process

4. After instruction, select **Instruction Complete Assign Testlet** button.



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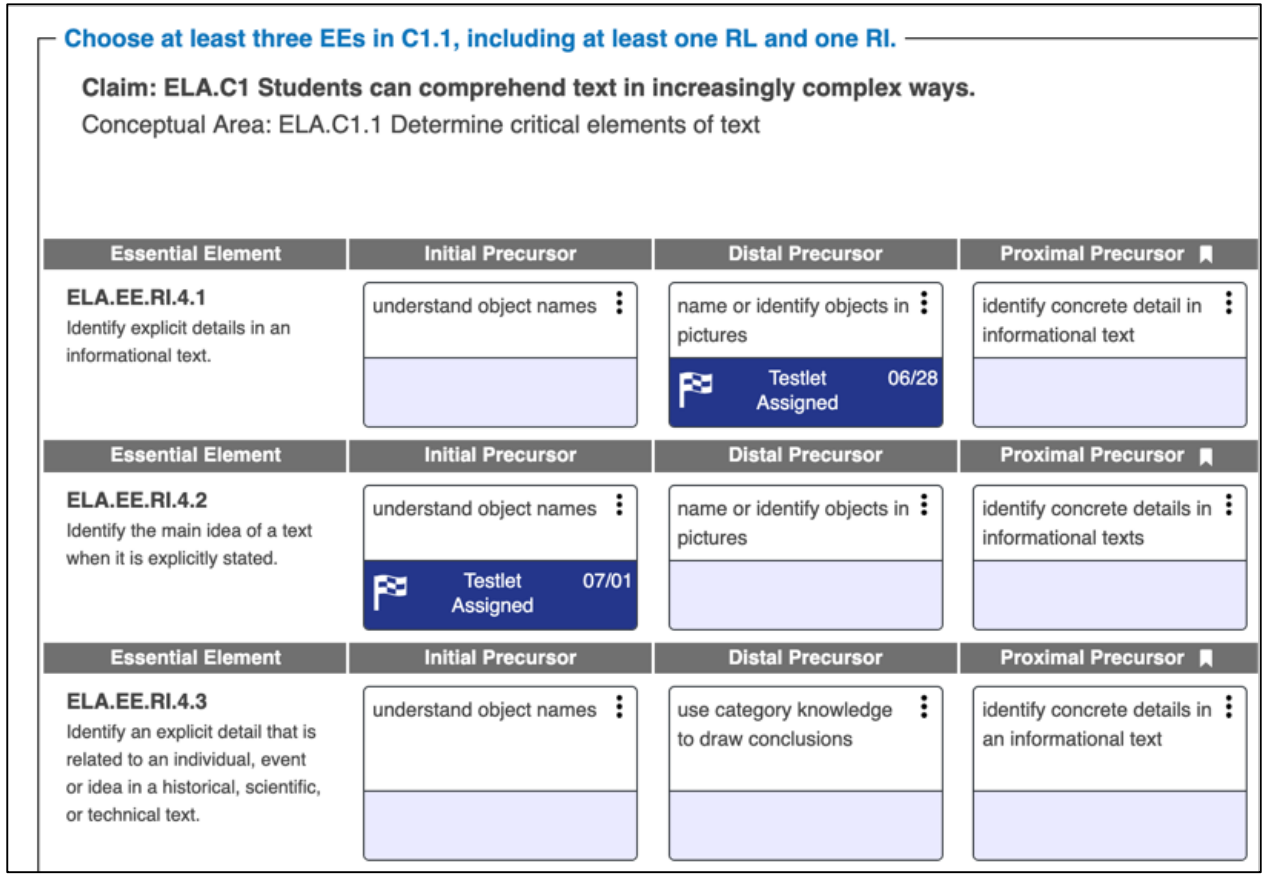
Instruction and Assessment Planner: Process

5. Testlet is assigned to student



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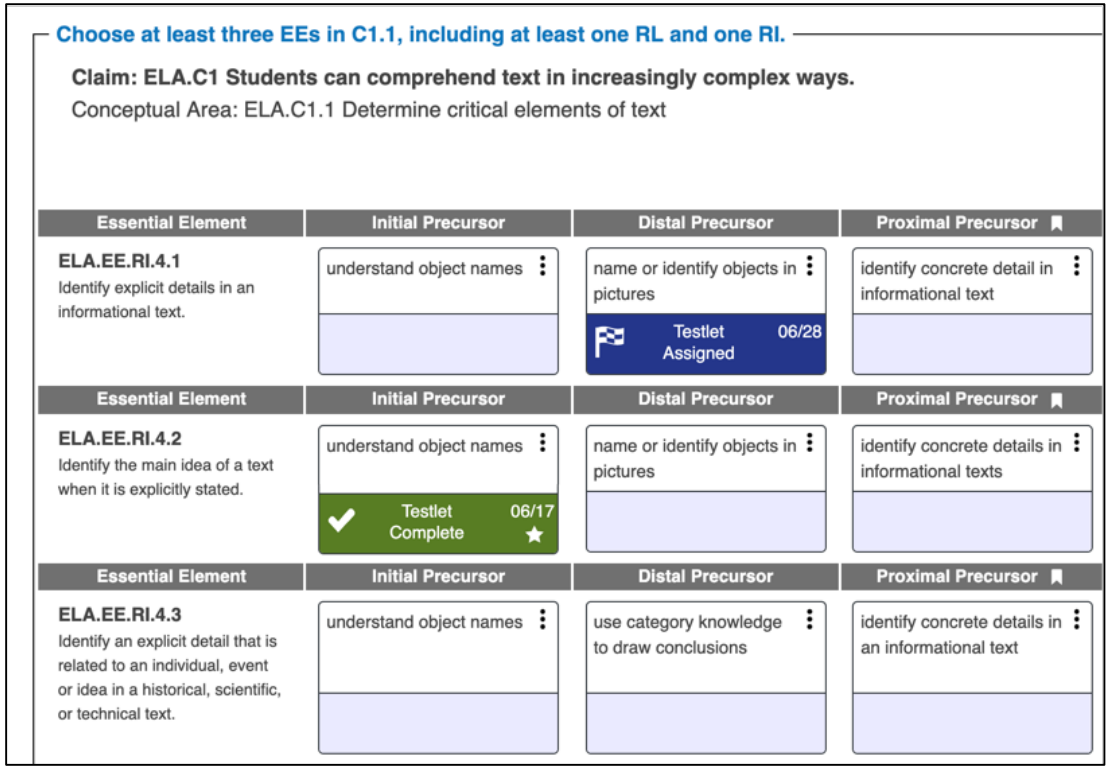
Instruction and Assessment Planner: Process

6. Administer testlet to student
7. Testlet marked as complete



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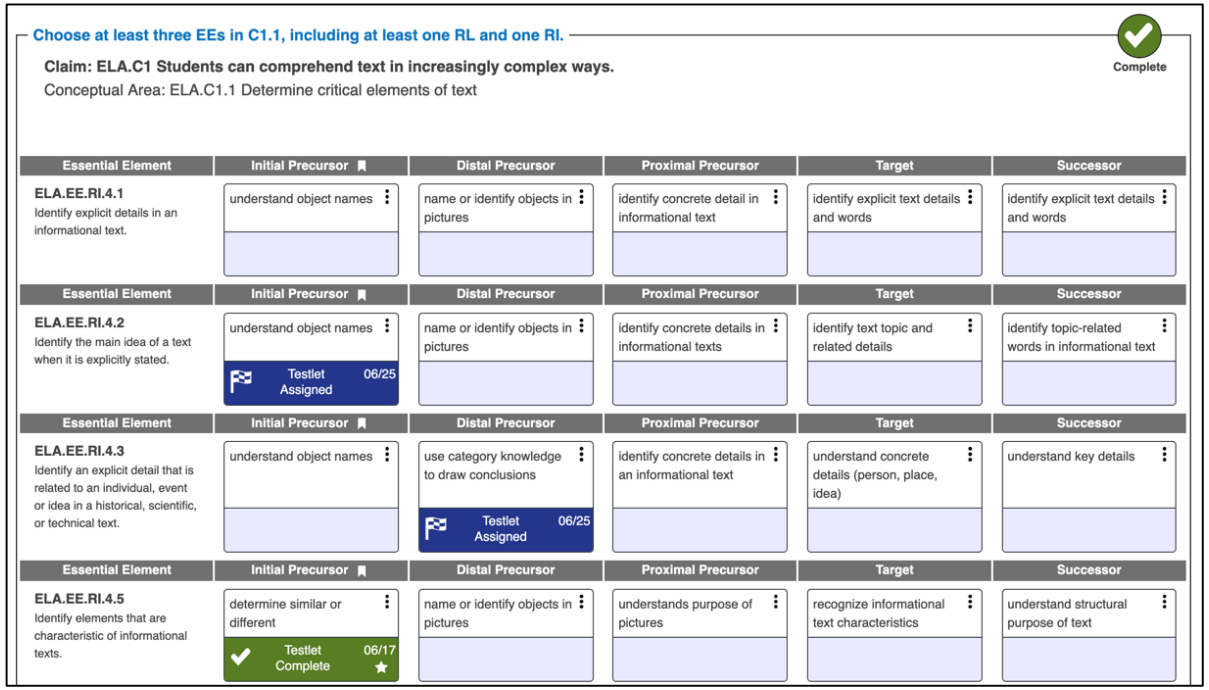
Instruction and Assessment Planner: Process

As instruction is given and testlets are administered and tracked in the planner, the status for each requirement is updated.



Choose at least three EEs in C1.1, including at least one RL and one RI.

Complete

Claim: ELA.C1 Students can comprehend text in increasingly complex ways.

Conceptual Area: ELA.C1.1 Determine critical elements of text

Essential Element	Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
ELA.EE.RI.4.1 Identify explicit details in an informational text.	understand object names	name or identify objects in pictures	identify concrete detail in informational text	identify explicit text details and words	identify explicit text details and words
ELA.EE.RI.4.2 Identify the main idea of a text when it is explicitly stated.	understand object names — Testlet Assigned 06/25	name or identify objects in pictures	identify concrete details in informational texts	identify text topic and related details	identify topic-related words in informational text
ELA.EE.RI.4.3 Identify an explicit detail that is related to an individual, event or idea in a historical, scientific, or technical text.	understand object names	use category knowledge to draw conclusions — Testlet Assigned 06/25	identify concrete details in an informational text	understand concrete details (person, place, idea)	understand key details
ELA.EE.RI.4.5 Identify elements that are characteristic of informational texts.	determine similar or different — Testlet Complete 06/17	name or identify objects in pictures	understands purpose of pictures	recognize informational text characteristics	understand structural purpose of text

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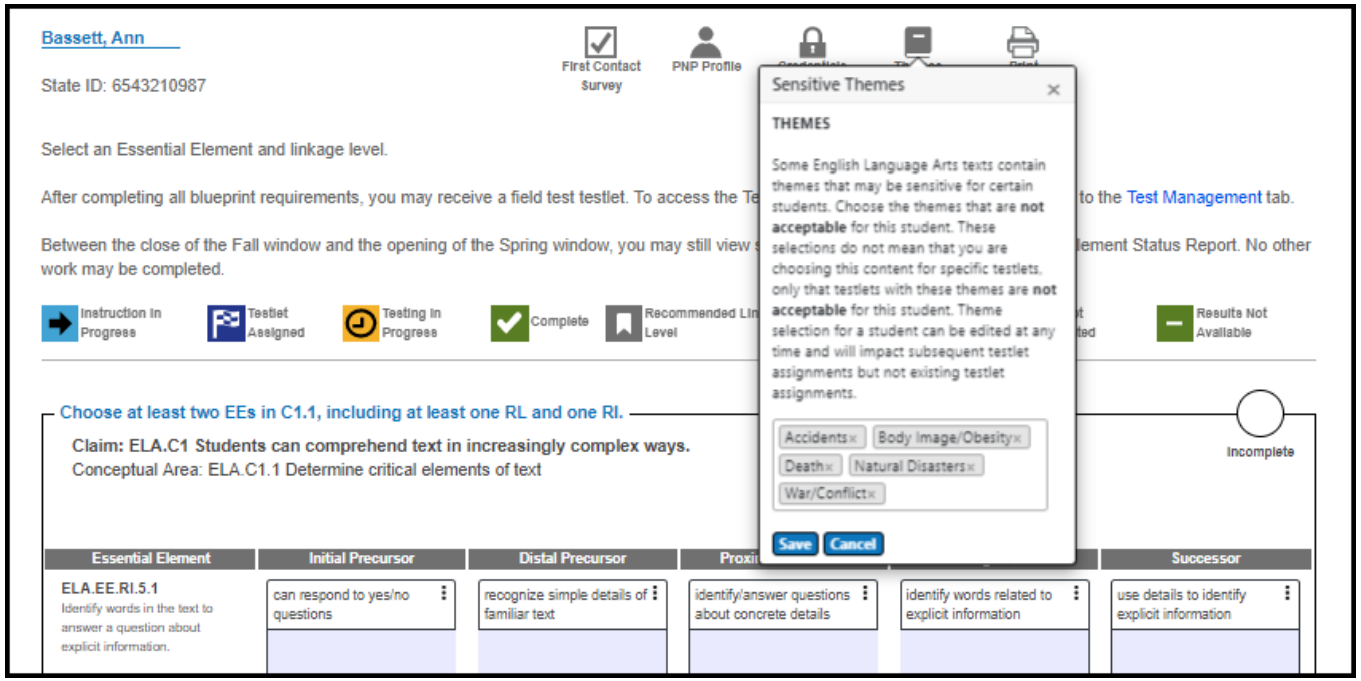
Instruction and Assessment Planner: Other Key Features

- Ability to print blueprint page
- Themes (sensitive text) for English language arts only need to be selected one time for the student and can be updated as needed



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STRATEGIES FOR MEETING BLUEPRINT REQUIREMENTS USING THE PLANNER

Strategies for Meeting Blueprint Requirements

When looking at the blueprint, decide what Essential Elements are required for *all* grades in your classroom.

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Strategies for Meeting Blueprint Requirements

- Fall and spring Window
  - Same set of ELA and/or mathematics Essential Elements can be taught and assessed during both the fall and spring window.
- Use professional judgment to decide how to create instructional units with the entire class to meet blueprint requirements.

Creating Instructional Units In Your Classroom

ELA Grade 3

Essential Element	Description*
Requirement: Choose at least three Essential Elements, including at least one RL and one RI.	
EE.RL.3.1	Answer who and what questions to demonstrate understanding of details in a text.
EE.RL.3.2	Associate details with events in stories from diverse cultures.
EE.RL.3.3	Identify the feelings of characters in a story.
EE.RL.3.5	Determine the beginning, middle, and end of a familiar story with a logical order.
EE.RI.3.1	Answer who and what questions to demonstrate understanding of details in a text.
EE.RI.3.2	Identify details in a text.
EE.RI.3.3	Order two events from a text as "first" and "next."
EE.RI.3.5	With guidance and support, use text features, including headings and key words to locate information in a text.

- Grade 3 ELA: EE.RI.3.2
  - Identify details in a text

ELA Grade 4

Essential Element	Description*
Requirement: Choose at least three Essential Elements in C1.1, including at least one RL and one RI.	
EE.RL.4.1	Use details from the text to recount what the text says.
EE.RL.4.3	Use details from the text to describe characters in the story.
EE.RL.4.5	Identify elements that are characteristic of stories.
EE.RI.4.1	Identify explicit details in an informational text.
EE.RI.4.2	Identify the main idea of a text when it is explicitly stated.
EE.RI.4.3	Identify an explicit detail that is related to an individual, event, or idea in a historical, scientific technical text.
EE.RI.4.5	Identify elements that are characteristic of informational texts.

- Grade 4 ELA: EE.RL.4.1 and EE.RL.4.3
  - Use details from the text

Creating an Instructional Unit in Your Classroom

Grade 3: Available Essential Elements and minimum expectation for each student's assessment

Conceptual Area	Essential Element	Description*
ELA.C1.1	**Requirement: Choose at least three Essential Elements, including at least one RL and one RI.**	
	EE.RL.3.1	Answer who and what questions to demonstrate understanding of details in a text.
	EE.RL.3.2	Associate details with events in stories from diverse cultures.
	EE.RL.3.3	Identify the feelings of characters in a story.
	EE.RL.3.5	Determine the beginning, middle, and end of a familiar story with a logical order.
	EE.RI.3.1	Answer who and what questions to demonstrate understanding of details in a text.
	EE.RI.3.2	Identify details in a text.
	EE.RI.3.3	Order two events from a text as "first" and "next."
	EE.RI.3.5	With guidance and support, use text features including headings and key words to locate information in a text.
ELA.C1.2	**Requirement: Choose two Essential Elements in C1.2 (L, RL or RI) – Essential Elements must be from different strands, i.e., RL and L, not RL and RL.**	
	EE.RL.3.4	Determine words and phrases that complete literal sentences in a text.
	EE.RI.3.4	Determine words and phrases that complete literal sentences in a text.
	EE.RI.3.8	Identify two related points the author makes in an informational text.
	EE.L.3.5.a	Determine the literal meaning of words and phrases in context.
	EE.L.3.5.c	Identify words that describe personal emotional states.
ELA.C1.3	**Requirement: Choose at least one Essential Element (RL or RI).**	
	EE.RL.3.9	Identify common elements in two stories in a series.
	EE.RI.3.9	Identify similarities between two texts on the same topic.
ELA.C2.1	**Requirement: All students are assessed in these Essential Elements through the writing assessment. In the Instruction and Assessment Planner, choose one linkage level. See Writing Testlet FAQ for more detail.**	
	EE.W.3.2.a	Select a topic and write about it including one fact or detail.
	EE.W.3.4	With guidance and support, produce writing that expresses more than one idea.

*Note: RL = Reading Literature, RI = Reading Informational, W = Writing, L = Language.

Creating an Instructional Unit in Your Classroom

Mathematics Grade 3

Requirement: Students demonstrate increasingly complex understanding of measurement, data, and analytic procedures. Choose two Essential Elements from Claim 3.		
M.C3.1	3.MD.1	Tell time to the hour on a digital clock.
	3.MD.4	Measure length of objects using standard tools, such as rulers, yardsticks, and meter sticks.
M.C3.2	3.MD.3	Use picture or bar graph data to answer questions about data.

Mathematics Grade 4

Requirement: Students demonstrate increasingly complex understanding of measurement, data, and analytic procedures. Choose two Essential Elements from Claim 3 in different conceptual areas.		
M.C3.1	4.MD.2.a	Tell time using a digital clock. Tell time to the nearest hour using an analog clock.
	4.MD.2.b	Measure mass or volume using standard tools.
	4.MD.2.d	Identify coins (penny, nickel, dime, quarter) and their values.
M.C3.2	4.MD.4.b	Interpret data from a picture or bar graph.

Use the Instruction and Assessment Planner as a Tool

- Combine several Essential Elements into an instructional unit and select them at one time.
- When the assessment window opens, select all Essential Elements planned for instruction so a student meets blueprint requirements.
- Print the student view page after making selections and create a timeline for instruction and assessment throughout the window in order to meet requirement.

Instructional Resources

NORTH DAKOTA

▸ Manuals and Blueprints

▾ Resources for Educators and District Staff

District Staff Training Resources

resources designed for district users, including Educator Portal how-to videos and role-specific training videos

Educator Resource Page for English Language Arts and Mathematics

resources and job aids to support test administrators

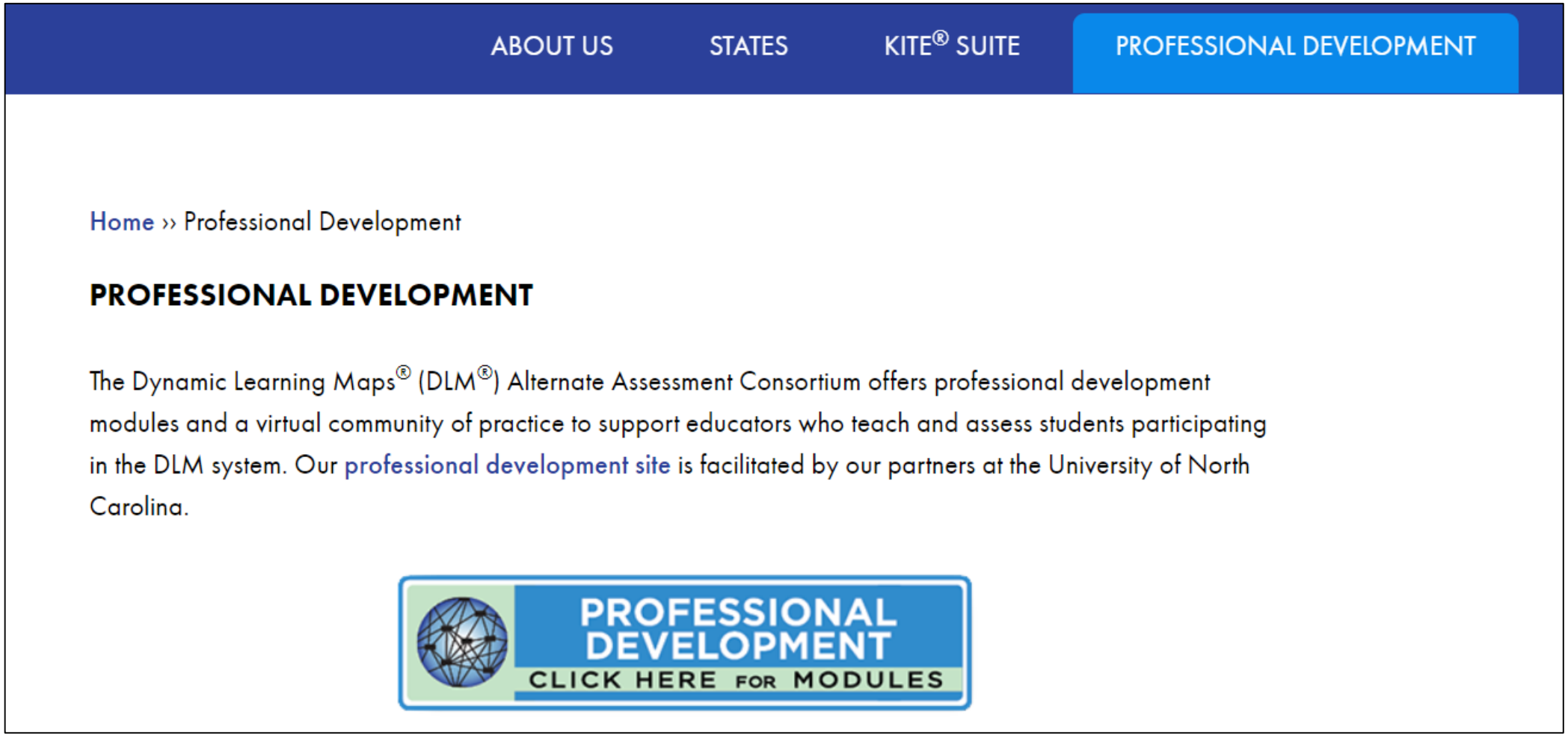
Educator Resource Page for Science

resources to support administrators testing in Science

Educator Resource Videos

videos provide information about assessment format, accessibility, and Educator Portal procedures

Professional Development Modules



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ND SCIENCE ASSESSMENT

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DLM Science Alternate Assessment Overview

- ND students in grades 4, 8, and 10 will be assessed using the DLM Science Alternate Assessment
- General science assessment

DLM Science Alternate Assessment

Fall Window

- Science Essential Elements for instruction and assessment are selected in the Instruction and Assessment Planner.
- Science testlets are optional in the fall window.
- Science testlets taken are not used for accountability purposes.

Spring Window

- Science Essential Elements are not selected in the Instruction and Assessment Planner.
- Science testlets are delivered by the Kite system.
- Testlets taken in the spring window are used for accountability purposes.

DLM Science Alternate Assessment

Testing for ELA, mathematics and science will

- Use the same testing platform
- Use the same data management system
- Access Profile and First Contact survey completed once per student
- One Required Test Administrator Training will include all content areas
- Science Student Report

DYNAMIC® LEARNING MAPS

DLM Science Essential Elements

- Linked to grade-level expectations identified in *A Framework for K-12 Science Education* (National Research Council 2012)
- Assessed EEs provided in a Science Blueprint for grade bands – elementary, middle, and high school
- Science Blueprint structure
  - Domains
    - Physical Science, Life Science, and Earth and Space Science
  - Core ideas
  - Topics

Essential Elements for Science

Domain: Physical
Core Idea: **PS3:** Energy
Topic: **PS3.D:** Energy in Chemical Processes and Everyday Life
State Standard for General Education: **5-PS3-1:** Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the Sun.

Domain: Physical
Core Idea: **PS3:** Energy
Topic: **PS3.D:** Energy in Chemical Processes and Everyday Life
State Standard for General Education: **5-PS3-1:** Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the Sun.
Essential Element: EE.5-PS3-1 **Target Level:** Create a model to describe that energy in animals' food was once energy from the Sun.
Precursor Level: Use models to describe that plants capture energy from sunlight.
Initial Level: Identify simple models that show that plants need sunlight to grow.
Connections to Science Practices Developing and Using Models
Connections to Crosscutting Concepts Energy and Matter
Connections to ELA Essential Elements **EE.RI.5.7:** Locate information in print or digital sources. **EE.SL.5.5:** Select or create audio recordings and visual/tactile displays to enhance a presentation.
Connections to Mathematics Essential Elements N/A

Essential Elements for Science

Essential Element: EE.5-PS3-1 **Target Level:** Create a model to describe that energy in animals' food was once energy from the Sun.
Precursor Level: Use models to describe that plants capture energy from sunlight.
Initial Level: Identify simple models that show that plants need sunlight to grow.

Domain: Physical
Core Idea: **PS3:** Energy
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Connections to Science Practices Developing and Using Models
Connections to Crosscutting Concepts Energy and Matter
Connections to ELA Essential Elements **EE.RI.5.7:** Locate information in print or digital sources. **EE.SL.5.5:** Select or create audio recordings and visual/tactile displays to enhance a presentation.
Connections to Mathematics Essential Elements N/A

Essential Elements for Science

Connections to Science Practices

Developing and Using Models

Connections to Crosscutting Concepts

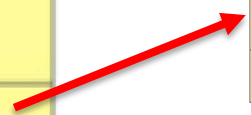
Energy and Matter

Connections to ELA Essential Elements

EE.RI.5.7: Locate information in print or digital sources.
EE.SL.5.5: Select or create audio recordings and visual/tactile displays to enhance a presentation.

Connections to Mathematics Essential Elements

N/A



Domain:
Physical

Core Idea:
PS3: Energy

Topic:
PS3.D: Energy in Chemical Processes and Everyday Life

State Standard for General Education:
5-PS3-1: Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the Sun.

Essential Element: EE.5-PS3-1
Target Level: Create a model to describe that energy in animals' food was once energy from the Sun.

Precursor Level: Use models to describe that plants capture energy from sunlight.

Initial Level: Identify simple models that show that plants need sunlight to grow.

Connections to Science Practices
Developing and Using Models

Connections to Crosscutting Concepts
Energy and Matter

Connections to ELA Essential Elements
EE.RI.5.7: Locate information in print or digital sources.
EE.SL.5.5: Select or create audio recordings and visual/tactile displays to enhance a presentation.

Connections to Mathematics Essential Elements
N/A

Science Assessment Design

Testlets

- Assess one EE
- 3-5 items
- Engagement activity
  - To motivate student, provide context, and activate prior knowledge
  - Format
    - Short story—read once like in mathematics
    - Longer story—read twice like ELA
    - Video—short, approximately 30 seconds
- Item type: multiple choice
- Nine testlets which cover the entire blueprint system routes students to testlets at the appropriate linkage level for each EE

Science Testlet Linkage Levels

- Target
  - Aligned to the content of the Essential Element
  - Most complex level
- Precursor
  - Less complex than the Target
  - Provide access to the Target level
- Initial
  - Less complex than the Precursor
  - Provide access to the Target level
  - Least complex level

Essential Element and Linkage Levels EE.MS-PS2-2

- Target Level
  - Investigate and predict the change in motion of objects based on the forces acting on those objects.
- Precursor Level
  - Investigate and identify ways to change the motion of an object (e.g., change an incline's slope to make an object go slower, faster, further).
- Initial Level
  - Identify ways to change the movement of an object (e.g., faster, slower, stop).

Assessment Administration Time

- Approximately 5-15 min per testlet
- Approximately 45–135 min total testing time
- Flexible scheduling—deliver one or more testlets in a single session

Science Educator Resource Page

SCIENCE RESOURCES

for Alaska, Arkansas, Delaware, District of Columbia, Illinois, Iowa, Kansas, Maryland, Miccosukee, Missouri, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Rhode Island, West Virginia, and Wisconsin

Learning Map Resources

Guide to Practice Activities and Released Testlets (pdf)

Science Professional Development Modules

Three science professional development modules are now available to states. The modules are hosted on the modules page of the DLM professional development website, on the Science tab, and are available in both facilitated and self-directed formats.

Essential Elements	Collections Lists	Sample TIPs	Instructional Activities

Essential Elements

- Currently Tested Essential Elements for Science
  lists of PDFs for each Essential Element available for assessment. These PDFs provide the nodes at each linkage level and a mini-map that shows the pathways between the nodes
- Development of DLM Essential Elements for Science (pdf)
  a short description of how Essential Elements in science were developed
- Essential Elements for Science (pdf)
- General Science Blueprint Phase 1 (pdf)
  pool of available preliminary Essential Elements (EEs) for Science
- Science Blueprint Phase 1 with Biology – DE and DC Only (pdf)
  pool of available preliminary Essential Elements (EEs), including High School Biology, for Science

Science Educator Resource Page

Essential Elements	Collections Lists	Sample TIPs	Instructional Activities

Instructional Activities

Science instructional activities support teachers who are beginning to use the DLM Science Essential Elements during instruction. Model activities for each grade span (Elementary, Middle, and High School) are located below.

- EE.5.ESS1-2: The Daylight Hours
- EE.5.LS2-1: Food Cycles
- EE.5.PS3-1: Energy from the Sun
- EE.MS.ESS2-6: Weather Watchers
- EE.MS.LS2-2: What Animals Eat
- EE.MS.PS1-2: Chemical Changes
- EE.HS.ESS3-3: Conserving Natural Resources
- EE.HS.LS1-2: Respiratory System

Science Professional Development Modules

- 7 PD modules available
  - DLM Science Standards Framework Part 1 and 2
  - Science and Engineering Practices Part 1 and 2
  - Instructional Strategies for Teaching DLM Science
    - Part 1, 2, and 3

Thank You!

For more information:

https://dynamiclearningmaps.org/northdakota

DYNAMIC® LEARNING MAPS