

Training for the New Georgia Performance Standards Day 2: Unpacking Standards for Unit Development

# Participant's Guide General Curriculum & Special Education Directors

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# Acknowledgements

This training program was developed by the Georgia Department of Education as part of a series of professional development opportunities to help teachers increase student achievement through the use of the Georgia Performance Standards.

For more information on this or other GPS training modules, please contact Robin Gower at (404) 463-1933 or rogower@doe.k12.ga.us.

### Use of This Guide

The module materials, including a Leader's Guide, Participant's Guide, PowerPoint Presentation, and supplementary materials, are available to designated trainers throughout the state of Georgia who have successfully completed a Train-the-Trainer course offered through the Georgia Department of Education.



This is a one-day course, with approximately six hours of instructional time.

### Introduction

- Overview of the Module
- Review of Day One Content and Redelivery
- > Discussion of Day One Assignment

### Large Group Demonstration

- ➤ Identifying Big Ideas
- > Transforming Big Ideas into Enduring Understandings
- > Developing Essential Questions
- > Identifying Skills and Knowledge

### **Unpacking a Single Standard (Optional)**

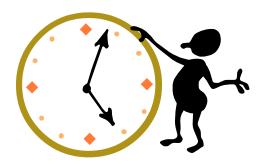
- Small Group Activity
- ➤ Large Group Discussion

### **Unpacking Multiple Standards**

- Small Group Activity
- ➤ Large Group Discussion

### Summary and Follow Up Work

- Action Planning
- > Follow-up Assignment
- Summary



### Module Goal

Demonstrate a deep understanding of the new Georgia Performance Standards and the standards-based education approach, through thoughtful curriculum planning, development of formative and summative assessments, and the design of instruction matched to the standards and research-based best practices. This shall be measured by student performance on progress monitoring and standardized criterion-referenced tests.

Key words from the goal:

- Deep understanding
- Georgia Performance Standards (GPS)
- Standards-based education
- Research-based best practices

Note that the goal will not be reached by any single day of training. It will take preparation, follow up, and eight days of classroom instruction to master this goal. Various days of training will deal with different components of the goal, such as curriculum planning, assessment, and instruction.

# Module Objectives

By the end of day two of training, participants will be able to:

- 1. Define and describe the rationale for identifying big ideas, enduring understandings, essential questions, and skills and knowledge for a standard.
- 2. Develop, for a given standard, the big ideas, enduring understandings, essential questions, and skills and knowledge (unpack the standard).
- 3. Unpack multiple standards to create cohesive units of study.





# The Process of Instructional Planning

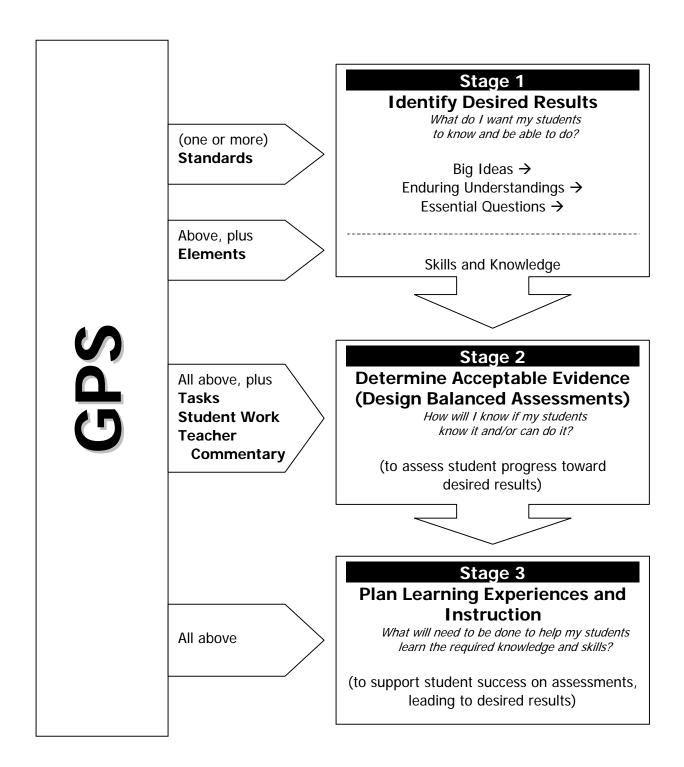
<u>Traditional Practice</u>	Standards-based Practice
Select a topic from the curriculum	Select standards from among those students need
<b>↓</b>	to know
Design instructional activities	<b>,</b>
	Design an assessment through which students will
₩	have an opportunity to demonstrate those things
Design and give an assessment	₩
	Decide what learning opportunities students will
1	need to learn those things, and plan instruction
▼	to assure that each student has adequate
Give grade or feedback	opportunities to learn
<b>↓</b>	<b>↓</b>
· ·	Use data from assessment to give feedback,
Move onto new topic	reteach or move to next level

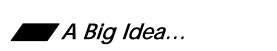
Adapted from "The Standards-based Instructional Planning Process: Backwards Mapping From Standards to Instruction" (2002, WestEd)

### **Compare and Contrast**

Traditional Practice		Star	ndards-based Practice
	With regard to	0	
	Assessmen	ut )	
	End of unit		
	What lesson pla Is driven by		

## GPS and the Backward Design Process







- ... <u>Provides a "conceptual lens" for organizing content.</u> A Big Idea refers to core concepts, principles, theories, and processes that should serve as the focal point of the curricula, instruction, and assessment. Big Ideas reflect expert understanding and anchor the discourse, inquiries, discoveries, and arguments in a field of study. They provide a basis for setting curriculum priorities to focus on the most meaningful content.
- ... <u>Serves as an organizer for connecting important facts, skills, and actions.</u> Big Ideas function as the "conceptual Velcor" for a topic of study. They connect discrete knowledge and skills to a larger intellectual frame and provide a bridge for linking specific facts and skills. A focus on these larger ideas helps students to see the purpose and relevance on content.
- ... <u>Transfers to other contexts.</u> Discrete facts do not transfer. Big Ideas are powerful because they embody transferable ideas, applicable to other topics, inquiries, context, issues, and problems. Because we can never cover all the knowledge on a given topic, a focus on the Big Ideas helps to manage information overload. Big Ideas provide the conceptual through lines that anchor a coherent curriculum.
- ...<u>Manifests itself in various ways within disciplines.</u> Big Ideas are typically revealed through one or more of the following forums: a core concept (e.g., adaptation), a focusing theme (e.g., man's inhumanity to man), an ongoing issue or debate (e.g., liberal vs. conservative), a puzzling paradox (e.g., poverty amidst plenty), an important process (e.g., writing process), an authentic problem or persistent challenge (e.g., illiteracy, voter apathy), an illuminating theory (e.g., Manifest Destiny), an underlying assumption (e.g., the markets are rationale), or differing perspectives (e.g., terrorist vs. freedom fighter).
- ...Requires uncoverage because it is an abstraction. A Big Idea is inherently abstract. Its meaning is not always obvious to students, and simply covering it (i.e., the teacher or textbook defining it) will not ensure student understanding. "Coverage" is unlikely to cause genuine insight; understanding must be earned. Thus, the idea must be uncovered—its meaning discovered, constructed or inferred by the learners, with the aid of the teacher and well-designed learning experiences.

**How to identify big ideas:** Read the standard thoroughly. Underline the big ideas in the standard. Make additional notes as needed. Note that this is just a stepping stone in the process; once you have turned your Big Ideas into enduring understandings, you do not need to write them down.





**Established Goal:** The student will understand the causes and effects of the Civil War with emphasis on slavery, states' rights, leadership, settlement of the West, secession, and military events. (Virginia Standards of Learning – History 5.7)

Sample Big Ideas: Slavery (as economic, political, and moral issue)

Federal control vs. states' rights

**Established Goal:** All students will connect mathematics to other learning by understanding the interrelationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life. (NJ Mathematics Standard 3)

Sample Big Ideas: Mathematical representation and modeling

Judging and ranking

**Established Goal:** Students will read and respond in individual, literal, critical, and evaluative ways to literary, informational, and persuasive texts. . . . (CT Language Arts Standard 1 – Reading and Responding)

Sample Big Ideas: Reading for meaning



## An Enduring Understanding...

- ... <u>Involves the big ideas that give meaning and importance to facts.</u> Enduring understandings are made up of the concepts, principles, and theories that weave many facts into revealing and useful patterns. They involve the (few) organizing priority ideas that enable us to make sense of past lessons, conduct current inquiry, and create new knowledge.
- ... Can transfer to other topics, fields, and adult life. Such understandings endure in that they enable us to make vital and informative connections in our learning—as students and as adults. For example, the idea that "might does not make right" applies to both playground disputes and international diplomacy.
- ...<u>Is usually not obvious, often counter-intuitive, and easily misunderstood.</u> An understanding is an inference, not a fact. It is an insight derived from inquiry. Key understandings in intellectual fields (e.g., in physics: *Objects remain in motion at a constant velocity if no force acts on them*) often violate common sense and conventional wisdom. They are thus often prone to misunderstanding by students. These understanding therefore cannot be covered; they must be uncovered.
- ... May provide a conceptual foundation for basic skills. The skill-based teaching in mathematics, foreign language, and physical education does not seem to deal with "understanding" in most units, all skills derive their value from the strategic principles that help us know when and how to use the skill. The understandings also justify the use of skills (e.g., the student who can explain why you should use a bent-arm pull in a swimming free style) and enable the student to extend the use of the skill to new situations (e.g., the use of bent-arm pull in back stroke).
- ...<u>Is deliberately framed as a generalization—the "moral of the story."</u> An understanding is a generalization derived from inquiry. It is the specific insight that should be inferred from study of the topic (not just the stating of the topic)—what we want the student leaving the study to realize. Note: The enduring understanding of a unit might be that there is no single agreed-upon understanding, or that people disagree about how the issues, facts, or text should be understood.

How to identify enduring understandings: Frame them as full-sentence generalizations starting with "The student will understand that..." Avoid statements that are vague or trite. It may help to think about common misunderstandings about the topic. Enduring understandings may be overarching (beyond the specifics of the unit) or topical.



### Enduring Understanding Samples



The student will understand that novelists often provide insights about human experience through fiction.

**The student will understand that** an effective story engages the reader by setting up questions – tensions, mystery, dilemmas, or uncertainty.

The student will understand that effective readers use specific strategies to help them better understand the text (e.g., using context clues, questioning the author, predicting what will come next, rereading, summarizing).

**The student will understand that** different types of texts (e.g., narrative, mystery, biography, expository, persuasive) have different structures.

The student will understand that understanding a text's structure helps a reader better understand its meaning.

The student will understand that audience and purpose (e.g., to inform, persuade, entertain) influence the use of literary techniques (e.g., style, tone, word choice).

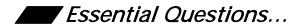
**The student will understand that** writers do not always say what they mean. Indirect forms of expression (e.g., satire, irony) require readers to read between the lines to find the intended meaning.

**The student will understand that** punctuation marks and grammar rules are like highway signs and traffic signals. They guide readers through the text to help avoid confusion.

The student will understand that listening is not passive. Effective listeners actively monitor their understanding of the speaker's message by summarizing, clarifying, and questioning.

Two Types of Enduring Understandings

Overarching Understandings	Topical Understandings
The modern novel overturns many traditional story	Holden Caulfield is an alienated antihero, not
elements and norms to provide a more authentic	simply a weird kid who mistrusts adults. (from unit
and engaging narrative.	on <u>Catcher in the Rye</u> )
Price is a function of supply and demand.	The cost of a Beanie Baby depends on demand and
	availability at any given time. (from unit on money
	<ul><li>elementary)</li></ul>





...<u>Have no simple "right" answer; they are meant to be argued.</u> Essential questions yield inquiry and argument—a variety of plausible responses, not straightforward facts that end the matter. They should *uncover* rather than cover the subject's puzzles and perspectives. They should result in conclusions drawn by the learner, not recited facts. Like enduring understandings, they <u>may be topical or overarching</u>.

Examples: Does art reflect culture or help shape it? What makes a great story?

...<u>Are designed to provoke and sustain student inquiry, while focusing learning and final performances.</u> Essential questions work best when they are designed and edited to be thought provoking to students, engaging them in sustained, focused inquiries that culminate in important performance. They involve the counterintuitive, the visceral, the whimsical, the controversial.

Examples: Does food that is good for you have to taste bad? Are censorship and democracy compatible?

... Often address the conceptual or philosophical foundations of a discipline. They reflect the most historically important issues, problems, and debates in a field of study.

Examples: What is a proof? Nature or nurture? Can fiction reveal truth?

... <u>Raise other important questions</u>. Essential questions lead to other important questions within, and sometimes across, subject boundaries.

Example: In nature, only the strong survive? (Leads to questions such as, "What is strength? Are insects strong, since they are survivors?

... <u>Naturally and appropriately recur.</u> The same important questions are asked and asked again throughout one's learning.

Example: What makes a book "great?"

### ...Stimulate vital, ongoing rethinking of big ideas, assumptions, and prior lessons.

They force us to ask deep questions about the nature, origin, and extent of our understanding. Example: (In light of fractions, place value, irrationals, and negative square roots) what is a number?

How to develop essential questions: Two to five per unit is reasonable. Put them in language appropriate to students. Use them as organizers for the unit, making the "content" answer the questions. Sequence questions so they lead naturally from one to another. Share essential questions with other teachers to ensure curricular coherence.



# Essential Questions May be Characterized By What They Do



- Go to the heart of a discipline. Essential questions can be found in the most historically important and controversial problems and topics in various fields of study: Is a "good read" a great book? Was arithmetic an invention or a discovery? Is history always biased? Do men naturally differ from women?
- Recur naturally throughout one's learning and in the history of a field. The same important questions are asked and re-asked as an outgrowth of the work. Our answers may become increasingly sophisticated, and our framing of the question may reflect a new nuance, but we return again and again to such questions.
- Raise other important questions. They invariably open up a subject, its complexities, and its puzzles; they suggest fruitful research rather than lead to premature closure or unambiguous answers. For example, what do we mean by "naturally" differ?



### Tips for Using Essential Questions

- Organize programs, courses, units of study, and lessons around the questions. Make the *content* the answers to the questions.
- Select or design assessment tasks, up front, that are explicitly linked to the questions.
   The tasks and performance standards should clarify what acceptable pursuit of, and answers to, the questions actually look like.
- Use a reasonable number of questions per unit (between two and five). Make less be more. Prioritize content for students to make the work clearly focus on a *few* key questions.
- Edit the questions to make them as engaging and provocative as possible for the particular age group. Frame the questions in "kid language" as appropriate.
- Through a survey or informal check, ensure that every child understands the questions and sees their value.
- Derive and design specific concrete exploratory activities and inquiries for each question.
- Sequence the questions so they lead naturally from one to another.
- Post the overarching questions in the classroom, and encourage students to organize notebooks around them to emphasize their importance for study and note taking.
- Help students personalize the questions. Encourage them to share examples, personal stories, and hunches, and to bring clippings and artifacts to class to help the questions come alive.
- Allot sufficient time for "unpacking" the questions—examining subquestions and probing implications. Be mindful of student age, experience, and other instructional obligations. Use question-concept maps to show relatedness of questions.
- Share your questions with other faculty to make planning and teaching for cross-subject
  matter coherence far more likely. To promote essential questions schoolwide, ask
  teachers to post their essential questions in the faculty room or in department meeting
  and planning areas. Circulate questions in the faculty bulletin and present and discuss
  them at faculty meetings.





**Knowledge**. Getting students to construct meaning, organize information, and (selectively) store information. This includes:

Vocabulary
 Terminology
 Definitions
 Key factual information
 Formulas
 Critical details
 Important events, people
 Principles
 Sequence and timelines
 Concepts

**Skills.** Getting students to demonstrate the ability to do something. These may be very simple, discrete operations, or more complex creative ones. This includes:

- Actions, procedures, and processes
- Basic skills—decoding, arithmetic computation
- Psychomotor skills—running, swimming a back stroke, playing an instrument
- > Study skills

- Communication skills—listening, speaking, writing
- Thinking skills—comparing, inferring, analyzing, interpreting
- Research, inquiry, investigation skills
- ➤ Interpersonal/group skills

### Verbs to use when stating skills and knowledge. These are samples only:

Demonstrate Create Model > Write Derive Critique Predict Draw State Compare/contrast
Prove > Translate Evaluate
Illustrate
Judge
Make meaning of
Choose
Imagine ShowSynthesizeJustify Describe Adapt ➤ List Build Design Determine Express > Perform Imagine Induce Make sense of Solve Use Instruct > Test Assess

How to develop skills and knowledge statements: Look at the enduring understandings, essential questions, and elements. Ask yourself, "What skills and knowledge do students need in order to reach this goal?" Start each skill/knowledge statement with a verb.



# Levels of Generality of Declarative and Procedural Knowledge

<u>Declarative Knowledge</u>		Procedural Knowledge
Organizing Ideas	General	Processes
(general statements for	•	<ul> <li>procedures that involve</li> </ul>
which examples can be		many component parts
provided)		that have subcomponents
- generalizations	4 6	·
- principles		Skills
		- Tactic (general rules
Details		governing an overall flow
- episode		of execution of steps)
- cause/effect sequence		• •
- time sequence, or		- Algorithm (a single set
- fact		of steps that must be
		performed in a specific
Vocabulary	Specific	order)
- terms	·	•
- phrases	Level of Generality	

Source: "A Report Documenting The Process For Developing An Integrated Standards-Based Instructional Unit," McREL, September 2003.



### Georgia Performance Standards Unpacked

**Overview:** Below are two Georgia Performance Standards that have been analyzed to identify the critical components that will be used to plan instruction and assessment. The process of analyzing a standard may feel a little confusing and challenging at first, but through collaboration and practice, it begins to feel more natural. It is the process of articulating what students should know, understand, and be able to do by the end of an instructional unit. Once a standard has been unpacked into its critical components, it will not need to be unpacked again.

**Process:** Begin with one or more specific standards. (Remember: Georgia Performance Standards are not meant to be taught in isolation but rather in conjunction with one another.) Prior to planning instruction and assessment, use the 4-step process below to unpack each standard into Big Ideas Enduring Understandings Essential Questions Knowledge and Skills.

**The Standards:** a) ELA, K, "Student gains meaning from orally presented text".

**b)** SCI, K, "Student will sort living and non-living organisms into groups

by observable physical attributes.

### Step 1: Identify the Big Ideas within the Standards

First, identify key phrases from the standard(s) that call out to be unpacked. Think about the processes and concepts you want to emphasize or concentrate on within your instructional unit. Key phrases from the sample standards that could be written as big ideas include "gain meaning" (process), "orally presented text" (concept), "sort" (process), "living versus nonliving" (concept), and "observable physical attributes" (concept). Then, determine which of those big ideas are most significant to include within the instructional unit. For this sample unit, the three big ideas will be:

- a) "gains meaning"
- b) "orally presented text"
- c) "observable physical attributes"

### Step 2: Create Enduring Understandings from the Big Ideas

Once you've identified the big ideas for your instructional unit, the next step is to reframe those ideas in terms of enduring understandings you want students to gain. Enduring understandings should always be written using the stem, "Students will understand THAT . . . " and should be written in grade-appropriate language as much as possible. Using the big ideas identified in step one, the statements below demonstrate appropriately identified enduring understandings for this unit.

Students should understand THAT:

- EU1: We can gain information by listening to other people.
- EU2: Print presents information in writing.
- EU3: Things have physical attributes or features.
- EU4: Physical attributes can be observed.
- EU5: Words, pictures, graphs, and charts help us learn.

### Step 3: Rewrite Enduring Understandings in Terms of Essential Questions

Now that you've created enduring understandings for your instructional unit, you need to create essential questions, which should be open-ended and designed to guide student inquiry and focus instruction. "How" should be the interrogative word of an essential question that address process skills, and "why" should be used for those questions that address cause and effect skills. Using the enduring understandings from step two, the following are examples of essential questions for this sample instructional unit:

- EQ1: How can we gain information by listening?
- EQ2: How is print organized?
- EQ3: How can physical attributes be observed and classified?
- EQ4: How does print communicate information?
- EQ5: How can words, pictures, graphs, and charts help us learn?

### **Step 4: Identify Desired Knowledge and Skills**

In this fourth and final step before designing instruction and assessment, you will articulate what you want your students to know, understand, and be able to do. Items you want students to know and understand are referred to as *declarative knowledge* and are generally facts, concepts, generalizations, or rules/laws/principles. Things you want students to be able to do are known as *procedural knowledge* and include specific skills, procedures, and processes. (Note: You may not focus on each of these categories of declarative and procedural knowledge during each instructional unit.) Using your essential questions as a guide, the following graphic depicts how you might organize the specific knowledge and skills you focus on within your instructional unit:

What students should know/understand: (Declarative Knowledge)	What students should be able to do: (Procedural Knowledge)
Key Facts	Skills
a)	a)
b)	b)
<u>Concepts</u>	<u>Procedures</u>
a)	a)
b)	b)
Generalizations	<u>Processes</u>
a)	a)
b)	b)
Rules/Laws/Principles	
a)	
b)	



### Unpacking Example

### **Established Goals:**

ELA4R1. The student demonstrates comprehension and shows evidence of a warranted and responsible explanation of a variety of literary and informational texts. The texts are of the quality and complexity illustrated by suggested titles on the Grade 4 reading list.

Stated or implied Big Ideas in the Stated or implied real-world **NOUNS and ADJECTIVES:** performances in the VERBS: K Comprehension Demonstrates Evidence Shows W illustrated **Explanation** Text Literary d Informational = communication **9** = gains meaning = types of text structures

### **Enduring Understandings:**

### Students will understand that . . .

- Literary and informational texts have characteristics that are unique.
- Clear communication is necessary to demonstrate understanding.
- Reading involves making sense of text.
- Effective readers use specific strategies to help them better understand.
- Different types of texts have different structures.
- Understanding a text's structure helps one understand its meaning.

### **Essential Questions:**

How does a student gain meaning from [literary] text?

What do good readers do?

How does a student use characteristics of various types of texts?

How do authors hook and hold their readers?

How does a student communicate his/her understanding?

### Unit Questions:

- a. Relates theme in works of fiction and nonfiction to personal experience. How does the theme of \_\_\_\_\_ relate to my life?
- b. I dentifies and analyzes the elements of plot, character, and setting in the stories

they read, write, view, or perfo	orm.			
What is plot?				
What type of plot does the	author use in?			
What types of conflict is us	ed in?			
How does conflict affect th	e story?			
How is conflict used to char	ge the characters in the story?			
What is the climax in the st	ory?			
How is the ending of the sto	ory effective?			
What is character?				
What types of characters a	re in? (protagonist, antagonist, character			
foil, stereotype)				
How did change du	ing the story?			
What is setting?				
What are the settings in				
What influence does the se				
How does the setting influe	·			
c. I dentifies the speaker of a poor				
Who is the narrator of the s				
How is the narrator a part of				
d. I dentifies sensory details and				
•	How is personification used in?			
What sensory details are used in the story?				
	se of sensory details in?			
e. I dentifies and shows the relev	•			
How is foreshadowing used				
When is the first time foreshadowing is used in the story? How does it change				
the story to the reader?				
•	es about setting, characters, and events and			
supports them with elaborating and convincing evidence from the text.				
the state of the s	te alternative setting for the story?			
9	erences between the characters or events and			
	ne actual experiences in an author's life.			
What is the theme of? How does it relate to the author's life?				
	d similar in the story? How are they			
different?				

Adapted from p. 122, Understanding by Workbook

# Unpacking a Standard

Standard (underline big ideas, add as needed)	
Critical Component(s) (ELA 4-12 only)	
Enduring Understandings	
Essential Questions	
Element(s)	
Skills and Knowledge	

# Unpacking Multiple Standards

Standards (underline big ideas, add as needed)	
Critical Component(s) (ELA 4-12 only)	
Enduring Understandings	
Essential Questions	
Element(s)	
Skills and Knowledge	



# Unpacking Goals Template

# **Unpacking Goals - Method 1**

Established Goals:	
Stated or implied Big Ideas in the NOUNS and ADJECTIVES:	Stated or implied real-world performances in the VERBS:
Understandings: Students will understand that	5
Essential Questions:	

Adapted from p. 122, Understanding by Workbook



**Directions:** Complete the following chart to help shape your team's work between this training session and the next one. Your goal is to complete stage one (unpacking the standards) for all the standards, so that you have a very rough outline of the entire year's units of study. Here are some questions to consider:

- ➤ How will we find the time to continue this work?
- ➤ How can we build and sustain a high level of enthusiasm and commitment?
- What is our timeline?
- ➤ How will we ensure accountability?
- ➤ How will we celebrate successes?

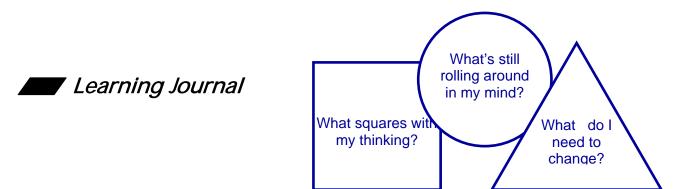
Step/Activity	Who	By When	How

# Follow Up Assignment

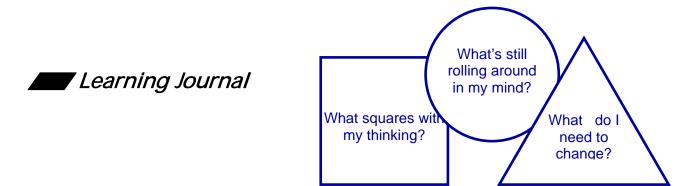
- > Continue to work on unpacking your standards!
- Choose one new Georgia Performance Standard to unpack. Then, make a list of ways to assess a student's understanding of those big ideas and enduring understandings.



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