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Revisiting Design Question #1, Element #1
"Learning Goals vs. Activities"

Excerpts are taken from Dr. Marzano's *The Art & Science of Teaching (2007) and A Handbook for the Art & Science of Teaching (2009)*

Make a Distinction Between Learning Goals and Activities.
Even though the term learning goal is commonly used by practioners, there appears to be some confusion as to its exact nature. For example, consider the following list, which typifies learning goals one might find in teachers' planning books:

Which are Learning Goals and which are Activities?

1. Students will successfully complete the exercises in the back of Chapter 3.
2. Students will create a metaphor representing the food pyramid.
3. Students will be able to determine subject/verb agreement in a variety of simple, compound, and complete sentences.
4. Students will be able to define characteristics of fables, fairy tales, and tall tales.
5. Students will investigate the relationship between speed air flow and lift provided by an airplane wing.

Activities = 1, 2, 5 *Learning Goals = 3, 4*

Some of these statements (above), involve activities as opposed to learning goals. **As the name implies, activities are things students DO**. As we will see in Design Questions 2, 3, and 4, activities are a critical part of effective teaching. **They constitute the means by which the ends or learning goals are accomplished. However, they are not learning goals.**

A learning goal is a statement of what students will know or be able to do.
A learning goal or objective state what students should learn over the course of a unit (or a lesson or an entire semester)!

Consider the following list of learning goals:

- Students will be able to compare and contrast key aspects contributing to the outcomes of World War I and World War II.
- Students will be able to factor and simplify quadratic equations.
- Students will be able to identify plot, theme, conflict, and resolution in a novel.
- Students will be able to create a reasonable hypothesis for a simple experiment and compare their hypothesis to the experiment's outcome.

Examples of Subject Specific Learning Goals & Activities		
Subject	**Learning Goals**	**Activities**
Science	Students will be able to explain how we know that … • The sun is the largest body in the solar system. • The moon and earth rotate on their axes. • The moon orbits the earth while the earth orbits the sun.	Students will watch the video on the relationship between the earth and the moon and the place of these bodies in the solar system.
	Students will be able to explain why and how … • Weather patterns change locally and be able to measure those changes using basic tools.	Students will write the weather forecast information, the high and low temperatures, and the precipitation in a daily journal.
Language Arts	Students will be able to … • Sound out words that are not in their sight vocabulary but are to know them.	Students will observe the teacher sounding and blending a word.
	Students will be to … • Use the rules of capitalization and will be able to correct capitalization mistakes in their own writing.	Students identify capitalization mistakes on a teacher handout.
Mathematics	Students will be able to • Solve equations with one variable.	Student will solve ten equations in cooperative groups.
	• Use an ordered pair to plot a point on a graph and vice-versa. • Identify and solve linear equations from analyzing a graph.	Students time each other in groups to see who can plot the most points on a graph.
Social Studies	Students will be able to • Establish their own barter economy in a classroom setting	Students will read a description of what the United States might be like if it were based on the barter system as opposed to a monetary system.
	Students will be able to explain: • How the antebellum period affected the Civil War. • The crucial events of the Civil War. • The immediate and lasting effects of the Civil War on the United States.	Students read Chapter 10 of the biography of Mary Todd Lincoln.

Additional Examples

Elementary Art.

The elementary art teacher is working on the concept of perspective with her art students. She wants them to understand two different ways perspective can be established in paintings or photographs. She states her learning goals as follows:

Students will be able to:

- *utilize two approaches to establishing perspective*.
- *explain the effect that establishing perspective has on the resulting work of art.*

To help students accomplish this goal, she plans an activity where students will show paintings exemplifying the two types of perspectives that are the focus of the learning goal as well as painting two works of their own.

***High School Technology*.**

This technology teacher designs a unit devoted to helping students understand the characteristics of Web sites that demonstrate academic rigor. He establishes two learning goals:

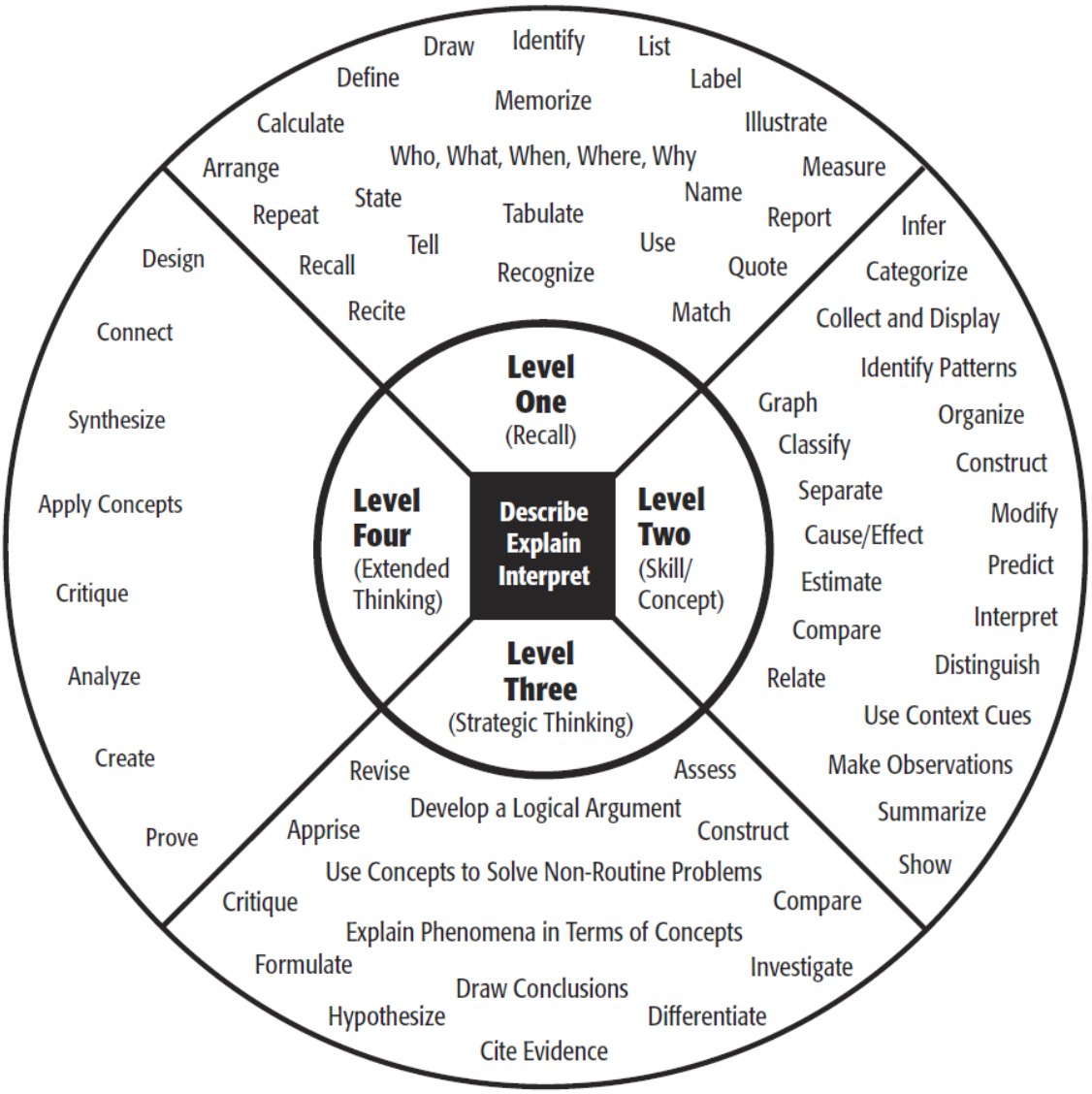
Students will be able to:

- *explain what makes a Web site academically rigorous.*
- *screen Web sites for their academic rigor.*

He plans a series of intial activities that will exemplify characteristics of academically rigorous Web sites. He also identifies assignments that teach students how to analyze specific Web sites.

***You will find Webb's Depth of Knowledge chart on the reverse of this page. Make use of this chart (and the action words in the chart) as you form your learning goals in the SWBAT or LWBAT format☺**

Depth of Knowledge (DOK) Levels



Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Recall elements and details of story structure, such as sequence of events, character, plot and setting.	Identify and summarize the major events in a narrative.	Support ideas with details and examples.	Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/ solutions.
Conduct basic mathematical calculations.	Use context cues to identify the meaning of unfamiliar words.	Use voice appropriate to the purpose and audience.	Apply mathematical model to illuminate a problem or situation.
Label locations on a map.	Solve routine multiple-step problems.	Identify research questions and design investigations for a scientific problem.	Analyze and synthesize information from multiple sources.
Represent in words or diagrams a scientific concept or relationship.	Describe the cause/effect of a particular event.	Develop a scientific model for a complex situation.	Describe and illustrate how common themes are found across texts from different cultures.
Perform routine procedures like measuring length or using punctuation marks correctly.	Identify patterns in events or behavior.	Determine the author's purpose and describe how it affects the interpretation of a reading selection.	Design a mathematical model to inform and solve a practical or abstract situation.
Describe the features of a place or people.	Formulate a routine problem given data and conditions.	Apply a concept in other contexts.	
	Organize, represent and interpret data.		