

Igniting and Inviting Motivation and High Performance

<h3>Safety</h3> <p>People need to believe that they are safe from fear of embarrassment or physical harm.</p>	<h3>Success</h3> <p>People need significant evidence of meaningful progress toward a goal, mastery of significant challenges, valued competence, creativity, or skillfulness.</p>
<h3>Love & Belonging</h3> <p>People need to feel valued, protected, accepted, respected, cared about, supported, held truly accountable and included.</p>	<h3>Fun & Enjoyment</h3> <p>People need to feel their situations are pleasurable, satisfying, challenging, successful, caring, interesting, meaningful, and/or enjoyable.</p>
<h3>Freedom & Independence</h3> <p>People need to feel included in meaningful choices, decisions, options, and direction setting in addition to believing their opinions are valued.</p>	<h3>Valued Purpose</h3> <p>People need to be involved in worthwhile, valuable, meaningful, interesting, and fun objectives and activities.</p>

Adapted from: Rogers, S. Peak Learning Systems (2005)

Are you motivating students for high performance?

1. ___ Stating and showing (in writing) objectives at the beginning and end of each lesson
2. ___ Providing frequent feedback to students about their learning related to the objectives (within 48 hours most of the time)
3. ___ Providing corrective and enrichment activities that respond to student progress and providing additional opportunities to demonstrate learning
4. ___ Explicitly teaching vocabulary as well as retention and retrieval (memory) strategies
5. ___ Explicitly teaching learning skills and strategies using graphic organizers (for patterning, thinking, reading comprehension, and writing)
6. ___ Explicitly teaching learning skills and strategies using summaries (for patterning, thinking, reading comprehension, and writing)
7. ___ Encouraging student self-assessment and adjustment

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Increasing Student Motivation and High Performance

1 Research about Learning Goals and Unit Design

Student achievement increases when the learning expectations/goals are aligned with state standard and identified for each unit and lesson. Teachers clearly identify the learning goals and agenda in writing and orally before the lesson begins and during the lesson's closure (Marzano, 2001; Walberg, 1995).

Benefits of Thoughtful Unit Design

1. Helps educators select significant essential concepts/topics, vocabulary, and skills.
2. Communicates learning expectations to students and parents and provides a visual way for students to connect vocabulary, knowledge, and skills during the learning process
3. Guides instructional decision making and delivery
4. Guides assessment design and evaluation of student progress and facilitates diagnosis, and intervention during the learning process
5. Provides an opportunity to reflect upon the scope and sequence of the curriculum identify prerequisite content and learning-to-learn knowledge and skills
6. Provides an opportunity for teacher and student self-assessment and adjustment
7. Increases communication between classroom teachers and specialists in a building/district and between sending and receiving sites
8. Helps new teachers prepare for their new assignments
9. Increases students motivation because it addresses their needs for safety, success, and valued purpose

Science Unit Plan

Unit Title: Earth Science: The Sun, The Planets, and Moon	Unit Length: 8-10 days (30 minutes each) Date Created: 5/6/2006
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Goals/Standards/Benchmarks: 12.F.2a, 12.F.2b, 13.B.2d, 11.A.2e, 11.B.2

Unit Overview

Unit Components	Objects in the Sky	Sun and planets	Suns affect on the Earth	Moon's Movement	Scientists Who Study the sun, planets, and moon	
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Unit Vocabulary/ Concepts/Topics	Unit Vocabulary/ Concepts/Topics	Unit Vocabulary/ Concepts/Topics	Unit Vocabulary/ Concepts/Topics	Unit Vocabulary/ Concepts/Topics	
<ul style="list-style-type: none"> •star •planet •crater •galaxy 	<ul style="list-style-type: none"> •solar system •Names of planets 	<ul style="list-style-type: none"> •axis •orbit •rotate •season •revolution •equator •gravity 	<ul style="list-style-type: none"> •lunar •tide •phase 	<ul style="list-style-type: none"> •telescope •astronomer •astronomy •astronaut •NASA 	

Learner/Performance Objectives: The student will . . .

1. Define and use unit vocabulary.
2. Create bar graphs.
3. Describe how the sun and stars move.
4. Estimate and measure distances.
5. Make and use models to illustrate the solar system.
6. Communicate concepts about the sun, moon, and planets.
7. Identify main idea and supporting details.
8. Collect and interpret data.

Assessments/Evidence

- Selected response (e.g., multiple choice, matching, true/false)
Multiple Choice
- Constructed response (e.g., fill-in-the-blank, short answer, label, graphic)
Fill in the blank vocabulary
- Product (e.g., essay, model, project)
Create a bar graph
Make a model
- Performance (e.g., speech, recital, demonstration)
Demonstrate and describe.
- Process (e.g., conferences, observations, logs)
Observations

2 Research about Formative and Summative Assessment

Student achievement increases when students receive feedback about their progress related to stated learning standards/goals. Teachers consistently use formative assessments (during learning, to promote learning) and summative assessments (at the end of learning, to evaluate learning). Students regularly receive feedback about their progress related to objectives/standards (Marzano, 2001).

Feedback given as part of formative assessment helps learners become aware of any gaps that exist between their desired goal and their current knowledge, understanding, or skill and guides them through actions necessary to obtain the goal (Ramaprasad, 1983; Sadler, 1989).

The most helpful type of feedback on tests and homework provides specific comments about errors and specific suggestions for improvement and encourages students to focus their attention thoughtfully on the task rather than on simply getting the right answer (Bangert-Drowns, Kulick, & Morgan, 1991; Elawar & Corno, 1985).

Assessment Options: **Selected response** (e.g., multiple choice, matching, true/false); **Constructed response** (e.g., fill-in-the-blank, short answer, label); **Product** (e.g., essay, model, project); **Performance** (e.g., speech, recital, demonstration); **Process** (e.g., conferences, observations, logs) (Mctighe, 1999)

Use Assessment Results to Guide Instruction and Increase Achievement

1. Tag your assessment items and tasks to make sure that you are assessing essential content and skills comprehensively?
2. Item analyze the assessment results to determine the strengths and needs of students related to essential content and skills.
3. Use the assessment data to make informed decisions about subsequent spiraling of content and skills as well as re-teaching standards that have not been mastered?

Rubrics/scoring guides are essential feedback tools for providing students feedback on performance tasks.

A good scoring rubric will:

- Help teachers define excellence and plan how to help students achieve it.
- Communicate to students what constitutes excellence and how to evaluate their own work.
- Communicate goals and results to parents and others.
- Help teachers or other raters be accurate, unbiased and consistent in scoring.
- Document the procedures used in making important judgments about students.

Herman, Aschbacher, and Winters (1992)

	Criteria				Pts.
	4	3	2	1	
Position Statement	Position is clearly stated and consistently maintained. Clear references to the issue(s) are stated.	Position is clearly stated and consistently maintained. References to the issue(s) at hand are missing .	Position is stated, but is not maintained consistently throughout work.	Statement of position cannot be determined.	---
Supporting Information	Evidence clearly supports the position; evidence is sufficient .	Evidence clearly supports the position; but there is not enough evidence .	Argument is supported by limited evidence .	Evidence is unrelated to argument.	---
Organization	Structure of work is clearly developed.	Structure developed reasonably well, but lacks clarity .	Some attempt to structure the argument has been made, but the structure is poorly developed .	There is a total lack of structure.	---

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3	<p>Correctives and Enrichments/Extensions Student achievement increases when students have additional opportunities to learn content and skills and additional opportunities to demonstrate acquisition of learning objectives (Guskey, Implementing Master Learning 1987). Particular objectives may require a mastery level (e.g. 70%) of acquisition.</p>	
	<p>Correctives . . .</p> <ol style="list-style-type: none"> 1. teach the same material in a different way than the original method. 2. involve students in a different way than the original involvement. And 3. provide students with successful experiences <p>Examples of Correctives</p> <ul style="list-style-type: none"> •re-teaching •alternative textbooks •alternative materials •workbooks •academic games (crossword puzzles, simulations) •small group study sessions •individual tutoring •learning centers and laboratories •computer-assisted instruction 	<p>Enrichments/Extensions . . .</p> <ol style="list-style-type: none"> 1. should be rewarding and exciting learning opportunities. 2. should be challenging. 3. should appeal to the need for achievement, affiliation, and/or control. <p>Examples of Enrichments/Extensions</p> <ul style="list-style-type: none"> •tutoring peers •developing practice exercises •developing related media materials •completing special projects, experiments •developing games, problems, and contests •using advanced computer-assisted lessons •locating background materials for future or current topics •developing additional formative assessments •planning to teach a mini-unit •creating bulletin boards and displays •applying knowledge to a new situation

4

Research about Content Vocabulary

Student achievement increases (an average of 33%) when students receive explicit vocabulary instruction that is relevant to the content material studied (Marzano, 2001).

Concept vocabulary is the door to understanding, memory storage, and information retrieval for your students. The inability to speak your discipline's language hampers their content mastery and learning success each day, semester, and academic year (Silver and Strong, 2005).

Research demonstrates the success of the following Six-Step Process to teaching academic vocabulary.

Step 1: Provide a description, explanation, or example of the new term or concept.

Step 2: Ask students to restate the description, explanation, or example in their own words and record it.

Step 3: Ask students to construct/select a picture, symbol, or a graphic representing the term.

Step 4: Engage students periodically in activities that help them add to their knowledge of the terms/concepts in their notebooks or electronic files.

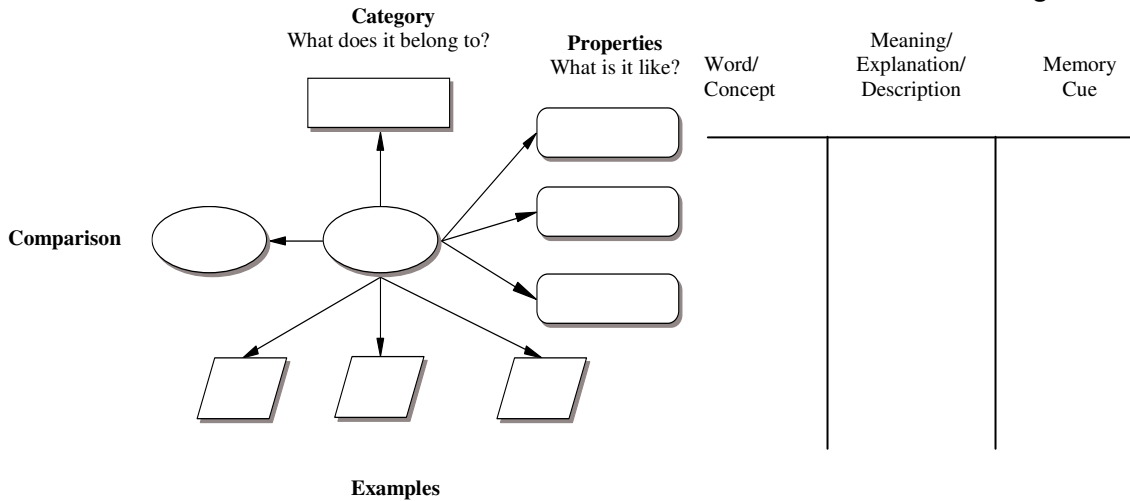
Step 5: Periodically ask students to discuss the terms with one another.

Step 6: Involve the students periodically in games/activities that allow them to play or practice terms/concepts

Adapted from: Marzano, Robert. (2005) Building Academic Vocabulary. Alexandria, VA: ASCD.

Creating Definitions in Your Own Words

Recording Academic Concepts/Words Three-Column Notetaking



Basics about Storing for Long-Term Memory and Retrieval

Intend

Determine which words/concepts to learn, plan time, and select strategies.

Focus

Select/recode definitions (see Concept of Definition Strategy below) and use an organized format listing words, definitions (9 words or less), and memory cues (see Three Column Notetaking Format).

Associate

Chunk/group vocabulary words and find patterns for storing information.

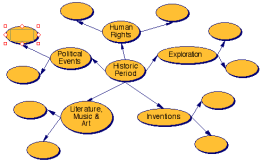
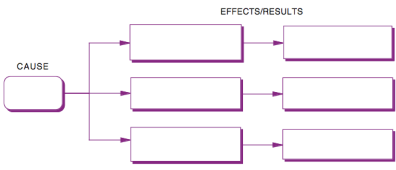
Deep Process

Use visual imagery, emotional, physical, auditory, spatial, and linguistic cues. Use memory cues that are colorful, rhyming, bizarre, unusual, familiar, rhyming, auditory, emotional, physical, and/or moving.

Practice

Use shorter study time periods (e.g., 10-15 minutes) more often to study with smaller numbers of words (e.g., 5-9 words) during each study period. Recite aloud when possible with consistent use of the memory cues. Celebrate success and continue to practice trouble words.

5 and 6	<p>Research about Improving Literacy, Thinking Skills and Learning Skills</p> <p>Student achievement increases when learning, literacy, and content-specific skills are explicitly taught (Marzano, 2001, Beyer, 1987). Research has found that effective teachers teach concepts and skills using a systematic, step-by-step instructional process. The six teaching functions are: review, presentation, guided practice, corrections and feedback, independent practice, and weekly and monthly reviews (Rosenshine, 1986). It takes between 15 and 25 practices to incorporate a skill or strategy into a person's learning repertoire.</p>
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<p>5 Graphic Organizers</p>  	<p>Comprehension/ Thinking Skills</p> <ul style="list-style-type: none"> •Main Idea •Significant Details •Sequence of Events •Comparison Relationships •Cause-Effect Relationships •Meanings of Words •Generalization •Author's Voice & Methods 	<p>Sample Graphic Organizers</p> <p>Spider Map; Network Tree; Cluster Map,; Bubble-Map</p> <p>Series/Chain of Events; Cycle Map; Flow Map; Storyboard; Continuum Scale; Time Line</p> <p>Venn Diagram; Comparison/Contrast Matrix</p> <p>Multi-Flow Map; Fishbone; Human Interaction Outline</p> <p>Three-Column Chart; Concept Definition Map</p> <p>Tree map; Layer Hierarchy, Brace Map, Problem/Solution Outline</p> <p>Spider Map; Network Tree, Cluster Map, Bubble Map; Brace Map</p>
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<p>6 Summary Frames</p>	<p>A summary frame . . .</p> <ul style="list-style-type: none"> •guides students' processing of new learning. •communicates expectations. •provides "road signs" to help the student determine if they are performing to expectations. •explicitly teaches various types of thinking/comprehension. <p>Types of Summary Frames</p> <ul style="list-style-type: none"> •sequence •comparison •MELCon •cause/effect •main idea/detail •character trait •conclusion/generalization •problem-solution 	<p>Sequence Summary Frame</p> <p>In order to _____ you must follow several steps. First, _____ Then, _____ Next, _____ Finally, _____</p> <p>Main Idea Summary Frame</p> <p>The main idea of this passage is _____.</p> <p>One fact or example that supports this main idea is _____.</p> <p>Another fact or example that supports this main point is _____.</p> <p>In addition, _____.</p> <p>Finally, _____ illustrates that (main idea) _____.</p>
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MEL-Con Paragraph Template

M = Main Idea

- It is the first sentence of the paragraph.
- This sentence “answers” the question or communicates your position.
- It sets up the paragraph.

E = Evidence of Examples

- Provide information from sources such as books, lectures, readings, etc. that support your main idea.
- Evidence can be quotes, statistics, facts, anecdotes, etc.

L = Link

- Link the evidence you used to the key idea in your topic sentence. The link is what you think or how you relate the evidence to the topic.
- Explain how the evidence supports your topic.
- Your link is unique -- it shows your thought process and why you chose the evidence you chose.

CON - Concluding Statement

- Write the last sentence of your paragraph that summarizes your answer/position and your evidence.
- It mentions your three pieces of evidence again in a new, concise way.

	M Topic Sentence
(transition to 1 st example)	E First Example or Evidence
	L Link to topic (Explain)
(transition to 2 nd example)	E Second Example or Evidence
	L Link to topic (Explain)
(transition to 3 rd example)	E Third Example or Evidence
	L Link to topic (Explain)
(transition to conclusion)	Con Concluding Statement Recap 3 examples

7 Research about Metacognition, Self Assessment, and Adjustment

Student achievement increases when students are encouraged to think about their thinking during learning and task performance. It is especially important in project work, because students must make decisions about what strategies to use and how to use them. Marzano’s (1998) research of 4000 different instructional interventions found that those that were most effective in improving student learning were those that focused on how students think about their thinking processes and on how students feel about themselves as learners.

<p>Self-Assessment and Adjustment (Metacognition)</p>	<p>Ask students to respond to the following questions at least on a weekly basis and after completing tasks, tests, and projects.</p> <ol style="list-style-type: none"> 1. What goals and tasks did you commit to and accomplish this week? 2. What process and strategies did you use to complete the tasks and accomplish the goals? Which strategy or step was particularly helpful? 3. What changes do you need to make in your strategies and plans? 4. What is your plan for making the changes? 5. What additional resources or assistance do you need to improve the quality of your learning/work. <p>Dr. Bobb Darnell bobbdarnell@mac.com 2/07</p>	<p>Encourage students to . . .</p> <ol style="list-style-type: none"> 1. select and understand appropriate strategies. 2. focus attention on what is needed to complete a task. 3. relate what is known to materials to be learned. 4. test the correctness of a strategy. 5. be aware of the pace of work in class and timelines. 6. detect and correct errors. 7. monitor task performance. 8. be aware of place and sequence during the learning process. 9. engage in problem solving, decision making, and goal setting. 10. keep track of progress.
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Giving Kids Candy Is Anything But Sweet

Parents who want their children to eat healthy are fighting a world eager to fill them with sugar.

The grade-school children in my neighborhood love their elderly bus driver. Every Friday morning they patiently climb onto the bus and accept a gift from him—a lollipop, piece of gum or some other type of candy. I'm sure he intends the gesture as an act of kindness, but as a parent who's trying to teach his two small children to eat healthy, I wish he'd stop. In any case, I believe the kids' affection for him has more to do with his ready smile than the sugary treats he hands out. Do I have the right to object? Or have I finally become one of those "whiner" parents?

My wife and I try to lead by example. We routinely exercise and demonstrate, not preach, the merits of a well-rounded diet. We have firm rules on dessert and candy intake—only after balanced meals and once per day. But I'm now coming to the realization that I'm naïve to believe that our effort to exert control over such matters will have an impact.

After my 5-year-old son finished his 45-minute gymnastics class a few days ago, the coach rewarded him with a Hershey's Kiss. At my 7-year-old daughter's school carnival last month, children were encouraged to purchase "candy grams" for each other—a bargain at only 50 cents for a full-sized Snickers, Baby Ruth or 3 Musketeers bar. Social norms being what they are, if you didn't receive at least five or six candy bars, you simply weren't popular. Last weekend both children returned home from birthday parties with their own gift bags, which, of course, contained an assortment of treats.

When I made a routine deposit at our local bank recently, the teller offered both of my children a

lollipop. The most popular store in downtown Wheaton, Ill., is a narrow alley of a shop that you literally have to enter single file. It sells only candy. For \$1, you can purchase a large bag of it. Every night there's a line out the door. It's viewed as a nostalgic part of Wheaton's charm. The thing that disturbs me most of all is that there is now a basket of candy on display at our family physician's office so that children can grab a piece at the end of their exam. Why would my kids listen to my ranting about eating healthy when they get candy at the doctor's office?

Our calendar now dictates more candy-based giving, too. Let's be honest—many kids equate Easter with getting candy from an imaginary bunny. Giving a box of chocolates to your spouse on Valentine's Day is akin to forgetting an anniversary.

Last year our Halloween-candy intake was so significant that I taught my daughter how to use PowerPoint to graph the quantity of different kinds of candy she had received—it was a unique "bar" chart, to say the least. (She had scored 14 Snickers, 12 3 Musketeers and 10 Hershey's.) By early December, I've usually thrown away all the remaining Halloween candy in a fit of frustration sparked by the most recent pediatric dental visit. That's about the time our neighbors start showing up with plates of Christmas cookies.

Regardless of the example my wife and I attempt to set, we're working against a lot of variables. So why don't we just grin and bear it? Well, because we understand what's at stake. According to a sobering report that recently appeared in the New England journal of medicine, the rapid

increase in childhood obesity may cause today's children to have a lower life expectancy than I do—shocking in an age of so many advanced health-care techniques. It was only by explaining the risk of type 2 diabetes to my daughter that I was able to coerce her into eating her vegetables—at least for one night.

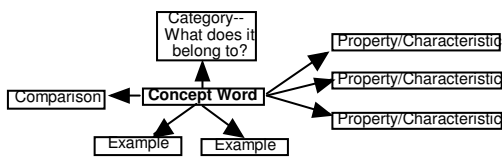
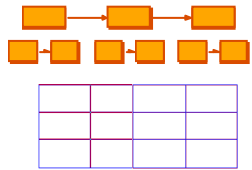
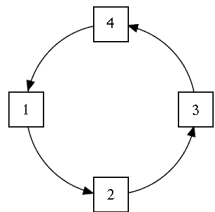
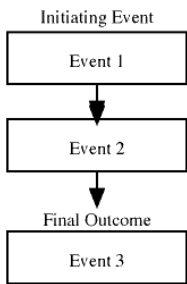
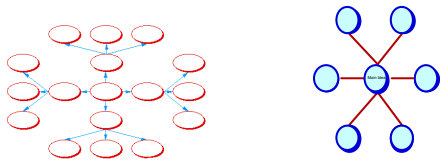
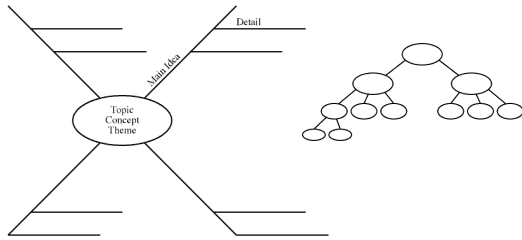
So my advice to anyone who considers it nice to give candy to children? Don't do it. Consider handling out pennies instead. You've probably got thousands of them sitting around and, in my town at least, you lose 10 percent of the value when you dump them into the machine at the grocery store. Ask your kids to put a penny in their savings bank, at least until our president saves Social Security. Also, stop giving out the birthday bags. Most parents are like my wife and me—glad to buy a small present and send our kids to your child's birthday party, if only to get them out of the house for a few hours. We don't expect anything in return. If you must give kids unsolicited food, consider a small box of raisins. They have a decent shelf life, and at least you're attempting to address their daily fruit requirement.

There are many bigger issues facing our world today than candy consumption, but what I'm really venting about here is the health of our children. We educate them about the dangers of drugs, smoking and drinking, yet we're still freely handing out sugar. It may not be mean to give candy to children, but I would submit that it's not as nice as you believe.

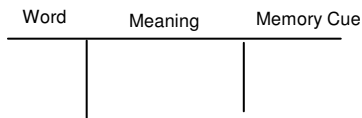
By Dave Beaseley, Wheaton, Ill.
Newsweek April 18, 2005

Graphic Organizers for Comprehending and Thinking

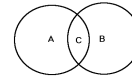
Main Idea and Significant Details



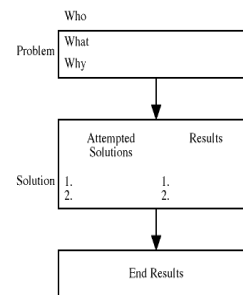
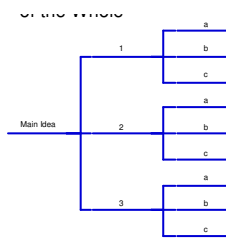
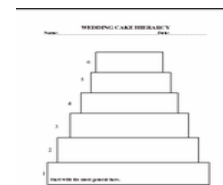
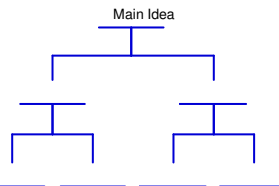
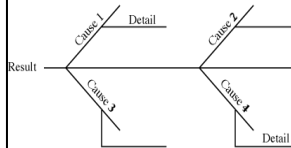
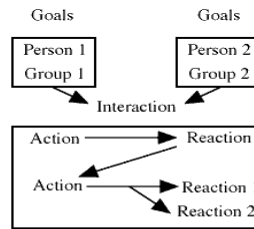
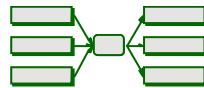
10. Three-Column--Word Meaning



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	Name 1	Name 2
Attribute 1		
Attribute 2		
Attribute 3		



Summary Frames are Powerful Tools for Teaching Independent Reading, Thinking and Writing

A summary frame/template . . .

1. guides students' processing of new learning.
2. provides a template of teacher expectations.
3. provides "road signs" to help the student determine if they are performing to expectations.
4. explicitly teaches various types of thinking and comprehension.

Sequence Summary Frame

In order to _____ you must follow several steps.

First, _____.

Then, _____.

Next, _____.

Finally, _____.

Chronological Summary Frame

_____ has a specific order.

At the beginning _____.

After that, _____.

Then, _____.

Next, _____.

The, _____ ended when _____.

Compare-Contrast Summary Frame

_____ and _____ are alike and are different in several ways.

First, they are alike because _____ but they are different _____.

Secondly, _____ is _____ while _____ is _____.

Finally, _____ and _____ are alike because _____.

But, they are different because _____.

Problem-Solution Summary Frame

The problem began when _____.

The _____ tried to _____.

After that, _____.

Then, _____.

The problem was finally resolved when _____.

Definition/Word Meaning Summary Frame

The word/concept _____ is important to (subject) _____.

It relates to (category or big idea it belongs to) _____.

One main characteristic of (word/concept) is _____.

Another key characteristic/element is _____.

An example of this word/concept is _____.

Main Idea/Details Summary Frame

The main idea of this passage is _____.

One fact or example that supports this main idea is _____.

_____.

Another fact or example that supports this main point is _____.

_____.

In addition, _____.

Finally, _____ illustrates that (main idea) _____.

Cause/Effect Summary Frame

In order to understand the (effect/result) _____

you must identify the causes.

The first cause of (effect/result) _____ is _____.

_____.

Secondly, _____ was another cause of

(effect/result) _____.

A third cause of (effect/result) _____ is _____.

It is clear that (effect/result) _____ has a number of

contributing causes.

Character Trait Analysis Summary Frame

A significant personality characteristic of (character name)

_____ in the (book/story/passage) _____ is

that he/she was (characteristic) _____.

The first incident where/way that the character demonstrates

(characteristic) _____ was _____.

A second incident where/way that the character demonstrates

this trait was _____.

(Character) _____ also shows this trait when he/she

_____.

Finally, (character) _____ shows that he/she is

(characteristic) _____ when _____.

It is clear that (characteristic) _____ makes

(character) _____ an (choose one--interesting, fascinating, important, etc) character in (book/story)

_____.

Conclusion/Generalization Summary Frame

A person can conclude that _____.

The first reason for/evidence that (conclusion/ generalization)

_____ is _____.

A second reason for/evidence that (conclusion/ generalization)

_____ is _____.

Yet another example that, (conclusion/generalization)

_____ is _____.

There is no question then that

(conclusion/generalization) _____.

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Igniting and Inviting Student Motivation and High Performance

Learning by Doing Goals—Today you will . . .

1. Be familiar with **changes** to our learners and educational context.
2. Be familiar with successful instructional practices and learning strategies.
3. Know additional ways to intervene when students demonstrate low performance.

Agenda

- Exploring **changes** to our learners and educational context
- A motivation model
- Two important practices for success
- Demonstration of powerful learning strategies

Homework

1. Apply at least one strategy to help at least one student become more successful and responsible.
2. Tell one colleague or other educator about your success or seek help with challenging problems.

1. How do you motivate average and above average students?

2. How do you motivate students who are performing poorly?

3. How do you motivate your very high performers?