

Research about Motivation

1. Safety

People need to believe that they are safe from fear of embarrassment or physical harm.

2. Success

People need significant evidence of meaningful progress toward a goal, mastery of significant challenges, valued competence, creativity, or skillfulness.

3. Love & Belonging

People need to feel valued, protected, accepted, respected, cared about, supported, held truly accountable and included.

4. Fun & Enjoyment

People need to feel their situations are pleasurable, satisfying, challenging, successful, caring, interesting, meaningful, and/or enjoyable.

5. Freedom & Independence

People need to feel included in meaningful choices, decisions, options, and direction setting in addition to believing their opinions are valued.

6. Valued Purpose

People need to be involved in worthwhile, valuable, meaningful, interesting, and fun objectives and activities.

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

Research about Formative and Summative Assessment Related to Academic Vocabulary

Student achievement increases when students regularly 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) (Marzano, 2001).

- 1) Inform students about the target vocabulary words at the beginning of the unit and place the word in a visual organizer.
- 2) Shorten assessment cycle (less content information more frequently)
- 3) Use a variety of ways to assess vocabulary.
- 4) Place definitions on the left side and match words on the right side.
- 4) Provide students with regular feedback about their performance and use correctives and retakes to guarantee mastery.
- 5) Item analyze test items to determine student needs, make instructional decisions, and validate assessments.

Correctives Needed When a Level of Mastery is Required for Academic Vocabulary

Student achievement increases when students have additional opportunities to learn content and skills and additional opportunities (e.g., re-test, re-do) to demonstrate acquisition of learning objectives (Guskey, Implementing Master Learning 1987).

Correctives . . .

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.

Examples of Correctives

- 1) re-teaching
- 2) alternative textbooks
- 3) alternative materials
- 4) workbooks
- 5) individual tutoring
- 6) computer-assisted instruction
- 7) small group study
- 8) academic games
- 9) learning centers and labs
- 10) Podcasts

Research about Metacognition, Self Assessment, and Adjustment

Student achievement increases when students are encouraged to think about their thinking during learning and task performance and to make needed strategy and/or effort adjustments (Marzano, 2000).

Encourage students to . . .

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.

Encourage students to respond to these questions.

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? **Use SMART goals.**
 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.
- Strategic and Specifically Stated in Writing
 - Measurable to Assess Progress and Success
 - Attainable Within Time and Other Resources/Constraints
 - Results-oriented with Clear Targets
 - Time-based

A Six-Step Process for Successfully Teaching & Learning Academic Vocabulary (Marzano, Pickering, 2005)

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

Examples of Strategies to Introduce Academic Vocabulary

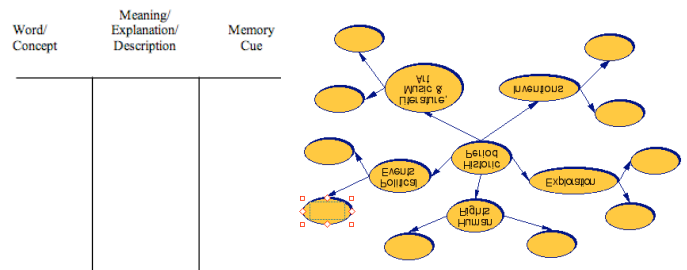
- Predicting •Skimming •Brainstorming •Values Conflict
- Pre-tests •Questioning •Visualizing •Journaling
- Drawing •Role Play •KWL •Anticipating
- Listening to a song •Viewing a movie •Advance Organizers

Health-Related Fitness	Skill-Related Fitness	Personal Fitness Evaluation	Heart
<ul style="list-style-type: none"> •Muscular Strength •Flexibility •Muscular Endurance •Cardiovascular Endurance •Body Composition 	<ul style="list-style-type: none"> •Agility •Balance •Coordination •Power •Reaction Time •Speed 	<ul style="list-style-type: none"> •Total Fitness •Physical Fitness •Goal Setting •VO2 Max •Bioelectrical Impedance •Composite 	<ul style="list-style-type: none"> •Pulse/Heart Rate •Carotid Artery •Radial Artery •Resting Heart Rate

Learning Objectives

1. Define and use unit vocabulary.
2. Demonstrate the ability to use a heart rate monitor properly.
3. Perform exercises and activities to enhance the components of skill and health-related fitness.
4. Differentiate skill-related and health-related fitness components.
5. Evaluate individual fitness levels and explain methods for improvement.

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

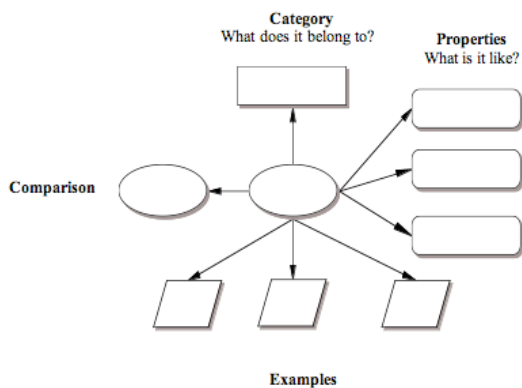


Sample Graphic Organizers

- Spider Map •Network Tree •Cluster Map •Bubble-Map
- Series/Chain of Events •Cycle Map •Flow Map
- Storyboard •Continuum Scale •Time Line
- Venn Diagram •Comparison/Contrast Matrix
- Fishbone •Human Interaction Outline •Brace Map
- Problem/Solution Outline

You can also use roots, prefixes, and suffixes, synonyms and antonyms, related words from previous units,, draw another graphic or picture.

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



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

Encourage students to use summary frames/templates . . .

- sequence •comparison •cause/effect •cycles
- main idea/detail •character trait •description •definition
- conclusion/generalization •problem-solution

Students can work in pairs and triads to create and read the summaries.

Use think-pair-share to have students share their pictures/graphics/memory cues, compare their definitions, discuss disagreement or confusion, seek clarification and connect to other content area topics.

Step 3: Ask students to construct/select a picture, symbol, or a graphic representing the term. Also encourage students to use auditory and kinesthetic imagery.

Try searching Google for Visual Dictionary.

Ways to make images even more memorable

- Moving •Colorful •Bizarre •Unusual •Familiar
- Rhyming •Auditory •Emotional •Physical



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

You can use friendly competition with teams and distributed practice/drill with pairs and triads.

Games like . . .

- Jeopardy •Question Matrix with Pictures •Vocabulary Charades
- \$100,000 Pyramid •Draw Me Pictionary •Talk a Mile a Minute/The Old Password Game

Shapes

- Square •Triangle
- Circle •Oval
- Rectangle •Diamond

Teaching Distributed Practice for Long-Term Storage and Retrieval

Before the Test

1. Explain to students how you can help them store and retrieve concept vocabulary with some powerful strategies.
2. Provide a demonstration on how to create a three-column format for important vocabulary words/events/concepts/ideas. Also, model paraphrasing definitions/explanations and the creation of memory cues (visual, auditory, kinesthetic, tactile, emotional).
3. Assign 5-7 words to learn for homework. Tell the students to spend 10-15 minutes at home on task. Students are paired for 1-2 minutes of recitation and practice in the classroom the next class session.
4. Ask the students how many of them know the words better on that day than they did the first day. Ask them to identify the strategies that helped them learn the words/concepts.
5. Repeat the process each day. Provide a practice test with about 10-14 words. Ask the students to discuss their memory strategies.
6. Guide the students to select trouble words for review the night before the test.

Word/Concept/ Important Name, Event, etc.	Meaning/ Explanation/ Description	Memory Cue/Picture, Movement, etc.

After the Test

1. Identify progress and improvement.
2. Guide students to select strategies that worked and abandon practices that were not effective.
3. Encourage the students to create improvement goals and plans.
3. Continue the process above for 30 days.

What will you teach the students?

1. Strategy and effort are better indicators for success than intelligence.
2. Distributed practice, the three-column format, deep processing, monitoring, and strategy adjustment are effective strategies for storing and retrieving information.
3. Self efficacy (i.e., I can do it!) can be developed when you select a challenging goal, use effective strategies, monitor progress, make adjustments, and celebrate success.

Vocabulary for chapter _____

Word	Definition/Description	Memory Cue