

Classroom Instruction the Works

Research-based Strategies for Increasing Achievement

"THIRTY-FIVE YEARS OF RESEARCH PROVIDES REMARKABLY CLEAR GUIDANCE AS TO THE STEPS SCHOOLS CAN TAKE TO BE HIGHLY EFFECTIVE IN ENHANCING STUDENT ACHIEVEMENT."

- [DR. ROBERT J. MARZANO](#)

The power of identifying similarities and differences

Using Analogies and Metaphors to Teach Marketing Education

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Introduction: About Robert Marzano and Classroom Instruction that Works: Marzano is recognized as an expert in both critical thinking and curriculum design. Over his 35 years in education, Robert Marzano has worked in every U.S. state and a host of countries in Europe and Asia. His goal is to translate research and theory into practical programs and tools for K-12 teachers and administrators.

The purpose of this mini-workshop is to introduce you to one of his books and the researched-based strategy of using similarities and differences as a way of increasing student achievement in your Marketing Education program. As teachers we can and do make a difference in student achievement.

Why should Marketing instructors use Marzano's strategy of using similarities and differences?

“As an instructional strategy, it includes various activities that help learners see patterns and make connections. For example, students compare things that are similar and contrast things that express differences. They classify when they identify features or characteristics of a group of objects or ideas, and then develop a scheme to organize those objects. Metaphors are created when two ideas or experiences are compared based on a common underlying structure. Finally, analogies provide another way to identify similarities and make comparisons. Each approach helps the brain process new information, recall it, and learn by overlaying a known pattern onto an unknown one to find similarities and differences. Looking for similarities and differences prompts the learner to consider, "What do I already know that will help me learn this new idea? This fosters relationships and connections to new understanding.”

Focus on effectiveness: identifying similarities and differences.

<http://www.netc.org/focus/strategies/iden.php>

Focus

In his book, Classroom instruction that works, Marzano provides us with nine (9) research-based strategies (listed below). Our focus will be on Identifying similarities and differences.

- Identifying Similarities and Differences
- Summarizing and Note Taking
- Reinforcing Effort and Providing Recognition
- Homework and Practice
- Nonlinguistic Representation
- Cooperative learning

- Setting Objectives and Providing Feedback
- Generating and Testing Hypotheses
- Cues, Questions, and Advance Organizers

What research has to say about identifying similarities and differences

Key Research Findings: <http://www.netc.org/focus/strategies/iden.php>

- Cognitive research shows that educational programs should challenge students to link, connect, and integrate ideas (Bransford, Brown, & Cocking, 1999).
- Results of employing these strategies can help to boost student achievement from 31 to 46 percentile points (Stone, 1983; Stahl & Fairbanks, 1986; Ross, 1988).
- Students benefit by having similarities and differences pointed out by the teacher in an explicit manner. This can include rich discussion and inquiry, but allows students to focus on the relationship or bridge to the new ideas (Chen, Yanowitz & Daehler, 1996; Gholson, Smither, Buhrman, & Duncan, 1997; Newby, Ertmer, & Stepich, 1995; Solomon, 1995).
- Students also benefit by being asked to construct their own strategies for comparing similarities and differences (Chen, 1996; Flick, 1992; Mason, 1994, 1995; Mason & Sorzio, 1996).
- Combining this strategy with the method of using nonlinguistic representation enhances student achievement significantly (Chen, 1999; Cole & McLeod, 1999; Glynn & Takahashi, 1998; Lin, 1996).

THE RESEARCH ON TEACHER QUALITY: There is a wide consensus among researchers and policy makers that teacher quality is a key component of school quality—perhaps the key component (Scheerens and Bosker, 1997; Wright, et. al, 1997; Sanders and Rivers, 1996; Sanders and Horn, 1995, Sanders, et.al, 1998; Saunders and Topping, 1999). Some of the most compelling recent research on this front has come from William Sanders, director of SAS in School’s assessment division, who has used Tennessee’s rich source of annual student achievement data to examine the impact of teachers on their classrooms’ academic progress over the course of a year. This “value added” approach allowed him to discover that individual teachers make an enormous difference in student achievement (Sanders and Rivers, 1996).

- There is consistent evidence that individual teachers contribute to student achievement. (Meeting the highly qualified teacher challenge. US Department of Education. (2003) p. 2.

So, how does one teach using similarities and differences?

1. Comparing
2. Classifying
3. Creating metaphors
4. Creating analogies

Definitions

Comparing refers to identifying the similarities and differences between things or ideas. To compare technically refers to identifying what is similar and the term contrasting refers to differences. As teachers, we often use the term compare to describe what is different and what is the same.

Classifying is the grouping of things that are alike into categories based on their characteristics.

Creating metaphors: a comparison is made between two seemingly unrelated subjects. Typically, a first object is described as being a second object. Even though the objects appear to be different, there is something they have in common or they have the same general pattern.

Creating analogies: commonly used to denote similarity or essential resemblance; but its specific meaning is a similarity of relations, identifying relationships between relationships.

The above definitions can be rather confusing.

Therefore, in order to get a better understanding of the four ways to use similarities and differences within a lesson, let's look at each with examples, in a lesson and using a graphic organizer. As this is how we will connect Marzano's strategies to the eBristro online training module on using graphic organizers in the classroom.

Keep in mind that our lesson plans and use of graphic organizers will follow the NC WiseOwl: e-Bistro online technology training modules: Using graphic organizers in the classroom. http://ebistro.org/modules/module1/index.php?module_id=51&mode=view

- We must first answer the questions from the “Graphic organizer worksheet,” prior to developing each lesson from eBistro.
- The lesson plans must include the following:

Title

- Description
- NC Standard Course of Study Goals/Objectives Met
- Computer/Technology Skills Goals/Objectives Met
- Process for the Project
- Estimated Time
- Assessment Method
- Resources (if applicable)

Graphic organizer sites:

Cmap Tools Support Page -

<http://cmap.ihmc.us/Support/He...>

Constructing Good Concept Maps - <http://cmapskm.ihmc.us/servlet...>

Graphic Organizers - <http://www.graphicorganizers.c...>

Inspiration and Kidspiration Resource Web Sites: <http://www.inspiration.com/pro...>

<http://www.readingquest.org/strat/compare.html>

Graphic Organizer Lesson Worksheet

List at least five topics each from two different subjects that you might like to create a Graphic Organizer/Concept Map for your students that you feel would lend well to the topic.

Select one topic from the list in #1 above that you would like have your students create a concept map to study. List two or three different kinds of graphic organizers that lend well to the topic. Examples may include Tree, Venn Diagram or Web. Use the samples from the Web sites for ideas.

List things students will need to prepare in your classroom and materials they will need to gather before creating the Graphic Organizer/Concept Map.

Graphic Organizer Lesson Worksheet

From: NC WiseOwl: e-Bistro online technology training modules using graphic organizers in the classroom (engagement activity).

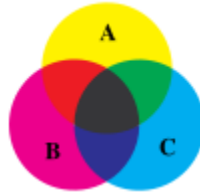
- List at least five topics each from two different subjects that you might like to create a Graphic Organizer/Concept Map for your students that you feel would lend well to the topic.

Small Business (6615)	Marketing (6621)
Financing a small business: Difference between an Income statement and a Balance sheet	Market segmentation: List the differences between demographic, geographic, psychographic, and behavioral segmentation.
Business Plan: Identify and describe the main components of a business plan	Economic measurements: Using a chart answer What are the economic measurements a country uses to determine their economic strength?
Business Risk: Identify and explain the four basic ways businesses handle risk	What are the freedoms of our Free Enterprise system?
Business Ownership: Compare and contrast the advantages and disadvantages of the four forms of business	Define and illustrate the communication process.
Selection of products and services: Compare competitors of a particular product	Define and explain the personality traits and interpersonal skills that are important in good working relationships.

- Select one topic from the list in #1 above that you would like have your students create a concept map to study. List two or three different kinds of graphic organizers that lend well to the topic. Examples may include Tree, Venn diagram or Web. Use the samples from the Web sites for ideas.

<p>Small Business (6615) Selection of products and services: Compare competitors of a particular product: Classification chart, Comparison matrix, Expanded Venn linking three items</p>

Example of an Expanded Venn



3. List things students will need to prepare in your classroom and materials they will need to gather before creating the Graphic Organizer/Concept Map.
 - Understanding of the lesson, competency to be learned or skill to be developed
 - Required reading material, text, internet source
 - Reading skills
 - Knowledge of how to find main points and key ideas
 - Teacher model process, explain purpose and benefits of using graphic organizers
 - Understanding of terms such as: relationship, ranking, hierarchy
 - Use of word program or spreadsheet
 - Ruler, paper, colored pencils
 - Samples of concept maps, graphic organizers
 - Use of familiar content

COMPARING (Sample lesson plan)

According to Marzano and associates, the process of comparing is not as simple as one may think. Thus, it is best for the teacher (teacher-directed) to introduce the process by:

- Identifying for the students the items they are to compare and the characteristics on which they are to base the comparison (Marzano, p.17).

Title: Comparisons between Cingular, Nextel and Verizon

Description:	Be able to explain what makes your product better assuming (you) the student manage a Verizon cell phone retail store.
Small Business (CTE) 7.00 Identify product decisions necessary for a small business.	<i>7.02 Identify factors that contribute to the selection of products/services in small business.</i>
Technology skill to be met	3.02 Use electronic resources for research.
Process:	<ol style="list-style-type: none"> 1. Research each company's product by going to their website. Use "search" to locate. Hint – go to www.phonedog.com 2. Using the Comparison Matrix graphic organizer provided, make your comparison of these service providers 3. Find an article and information about: What customers have said about each provider. 4. Add two more attributes or characteristics to the graphic organizer
Estimated time:	3 class periods (90 minute block)
Assessment:	Completion of comparison chart and a paragraph on which provider would you consider the better of the three and why. Information to support your findings should come from you comparison charts, news article and customer feedback. Customer feedback can be from family and friends who use that particular service
Resources:	Graphic organizer handout, Internet
Lesson review, feedback	Discussion, review of terms, exit question: How did using a graphic organizer (comparison matrix) help you in organizing your research and being able to develop a conclusion on the three cell phone service providers?

Compare/Contrast Matrix

	Name 1	Name 2
Attribute 1		
Attribute 2		
Attribute 3		

Comparisons Between Cingular, Nextel and Verizon

Characteristic	Cingular	Nextel	Verizon
Coverage (states you can get service in – service activation coverage)			
Plans offered to customers			
Technology they use			
A unique feature of this service provider			
Other characteristic?			
Other characteristic?			

Rubric for the above lesson plan:

4	Student uses important, as well as some less obvious, characteristics to compare the companies. Similarities and differences are accurately identified. Conclusion is explained in such a way that shows complete and detailed understanding.
3	Student uses important characteristics to compare the companies, but not the most important. Students understanding about the items show some misconceptions. Student tells what they learned.
2	The student uses characteristic to compare the companies but does not include the most important characteristics. The student's conclusion shows some misconceptions about the items. There are some mistakes in the comparison
1	The student uses unimportant characteristics to compare companies. There are many misconceptions and mistakes in the conclusion and comparison.
0	Not enough information provided to make a judgment. The student did not try to do the task.

Teacher comments/feedback:

See: A Handbook for Classroom Instruction That Works. *Comparing* (p.17).

ROBERT J. MARZANO, JENNIFER S. NORFORD, DIANE E. PAYNTER, DEBRA J. PICKERING, BARBARA B. GADDY . (2001). ASCD, Alexandria, Virginia

For the teacher:**Reflection for the lesson on comparing:**

Answer the following questions:

1. What critical thinking skills will students use when using or developing a graphic organizers/ concept Map?
2. What obstacles do you think your students might encounter when developing a graphic organizers/ concept map?
3. What are some of the benefits your students will experience from using graphic organizers/concept map that they would not have experienced?

Answer:

1. The critical thinking skills students will use or develop are: the ability to make a good/sound decision based on researched information, the ability to prove the validity of the information, access information gathered, identify similarities and differences of things/objects/ideas, be able to support or dispute based on information gathered, use of organization skills, and the students' will or should be able to rank their information and draw a conclusion.
2. Obstacles the students' may encounter when developing a graphic organizer such as the one used in the Comparing lesson, are: confusion due to not knowing about graphic organizers and the purpose of a graphic organizer, some may find it "stupid" as with other assignments they are given, on the other hand some may see it as "hard." In developing a graphic organizer like the comparison matrix, the student would need prior knowledge of using a word program or spreadsheet. As such, some may have this knowledge while others may not. Lastly, there is the reading level of the student, which may cause him/her not to gather the correct/right information and it is a powerful tool for students with learning disabilities.
3. The benefits to students using graphic organizers would allow them the opportunity to easily grasp information that would otherwise be difficult. They can actually see the flow, the connection, the sequencing and the sense behind the concept. They can become better writers (paragraph development) by seeing the connections and be able to summarize and make conclusions. The students will also be able to develop higher order thinking skills and problem-solving skills and according to Marzano, the student can see how similar to or how different from, a thing/object/idea may be.

Researchers examining the uses and benefits of **graphic organizers** in postsecondary reading comprehension (Katayama 1997; Robinson and Kiewra 1995; Robinson and Schraw 1994) have found that requiring students **to** graphically organize material presented in textbooks aids in student comprehension. Moreover, the effectiveness of **graphic organizers** is enhanced when students create them as a post reading strategy (Mealy and Nist 1989). <http://www.highbeam.com/doc/1G1-108693147.html>

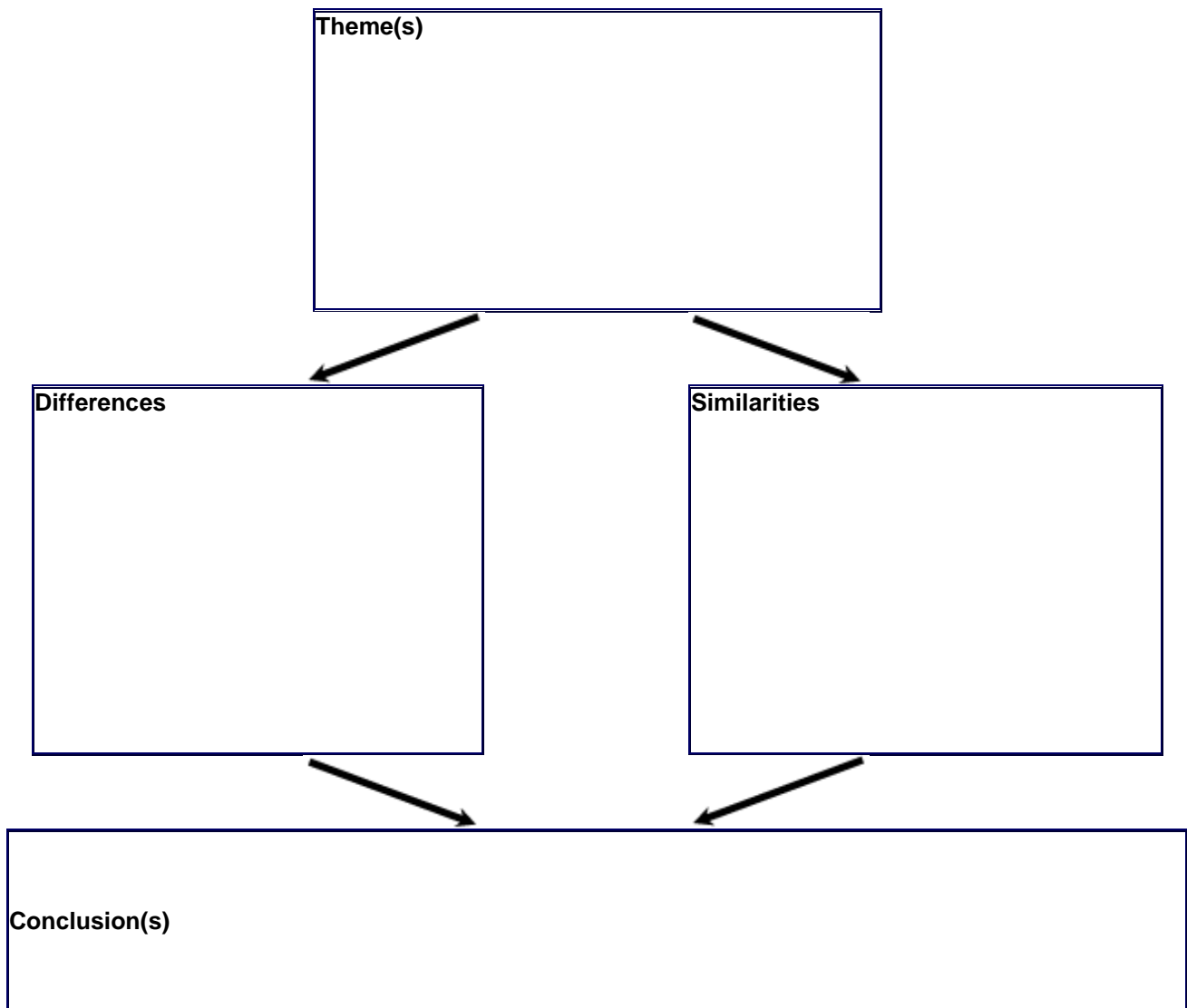
"Helping students think about new knowledge before experiencing it can go a long way toward enhancing student achievement. Teachers can use graphic organizers to facilitate this type of thinking in a variety of ways and formats."

Sample graphic organizers:

Name _____

Date _____

Theme(s) Comparison





Strategies for Reading Comprehension

Comparison-Contrast Charts

These are useful for looking at two quantities and determining in what ways they are similar and in what ways they are different. The chart pictured here is one way to approach this comparison. First you look at the similarities. Then you consider the differences, making sure to indicate on what criteria you are drawing out the dissimilarities.

See: <http://www.readingquest.org/strat/compare.html>

Name _____

Date _____

Meeting New Vocabulary

--	--

Word

Drawing Or Symbol For Word

Predicted meaning of word: _____

Based on that meaning, use this word in a sentence:

Definition from dictionary: _____

Based on the dictionary's meaning, use this word in a sentence:

Graphic Organizers from Thinkport provided by The U.S. Department of Education Star Schools Program. <http://www.thinkport.org/Technology/template.tp>

They offer a collection of pre-formatted graphic organizers that you can integrate into activities and lesson plans or use by themselves. They offer three different formats for your convenience:

-

Item	Description	Version
Character Map	Helps describe in detail the main character, their thoughts and actions. Good for short stories and novels.	HTML PDF WORD
Clustering	Good for organization of concepts, ideas, and as a pre-reading activity.	HTML PDF WORD
Compare/Contrast	Helps with similarities and differences in characters, situations, and concepts.	HTML PDF WORD
Concept Map	Good pre-writing activity. Helps with organization of main ideas and details.	HTML PDF WORD
Cornell Note-taking	Good for organizing information gained from reading textbooks or expository materials.	HTML PDF WORD
Fishbone	Good for organizing details and events through cause and effect.	HTML PDF WORD
Hypothesizing	Good in helping to identify the three main components of a hypothesis.	HTML PDF WORD
K-W-H-L Chart	Good for tapping background information prior to introducing a new concept.	HTML PDF WORD
Plot Diagram	Good for diagramming and outlining the plot and elements of a story.	HTML PDF WORD
Sequence of Events	Good for placing main events	HTML

Chart	in their order of occurrence.	PDF WORD
Spider Map	Helpful with organizing several ideas with supporting details.	HTML PDF WORD
SQ3R	Good reading strategy used to comprehend expository material.	HTML PDF WORD
Story Map	Helps with the outline or blueprint of a fictional story.	HTML PDF WORD
Storyboard	Helps to illustrate the main events.	HTML PDF WORD
Timeline	Helps with sequencing events in their proper order.	HTML PDF WORD
Tree	Helps with connections about different ideas and details. Useful when background knowledge is limited.	HTML PDF WORD
Venn Diagram	Good for comparison of ideas, concepts, and character traits. Useful as a pre-writing activity.	HTML PDF WORD
W's Organizer	Helps with organizing factual ideas around the 5 main questions: who, what, where, when and why.	HTML PDF WORD
Web	Helpful with developing a framework for ideas and concepts. Useful pre-writing activity.	HTML PDF WORD
Web Site Profiler	Useful tool for helping to evaluate the quality of information on a web site.	HTML PDF WORD
Wheel and Spoke Diagram	Helpful with developing a framework for ideas and concepts. Useful pre-writing	HTML PDF WORD

Classifying (sample lesson)

Using a graphic organizer from www.thinkport.com (above) and Marzano's strategy of classifying, we will develop a marketing lesson.

Title: Using a Spider Map to understand Economic resources aka Factors of production

Description	Students will be able to define, explain, illustrate and give examples of the four categories of resources aka factors of production.
NCSCOS	<p>3.00 Understand economic principles and concepts fundamental to marketing</p> <p>3.01 Recognize terminology related to economics.</p>
Technology goal	3.03 Select and use technological tools for class assignments, projects, and presentations.
Process	<ol style="list-style-type: none"> 1. We will read pp. 52-53 from text. 2. Check for student understanding of the four resource categories. 3. Given a spider map, students will complete/classify the main topic and key points. On the diagonal line write resource, in circle give name of main topic, two horizontal lines are provided on the map, add two more for other examples of that resource. 4. Students will provide a picture or a drawing for each resource 5. Students are to write out why items are classified the way they are
Time	1 (90) minute class period
Assessment	Classifying rubric, Vocats test on 3.01
Resources	Textbook: Marketing Essentials, Power point from 6621 curriculum, magazines

Teacher: to summarize and give feedback. Students: to tell what they learned.

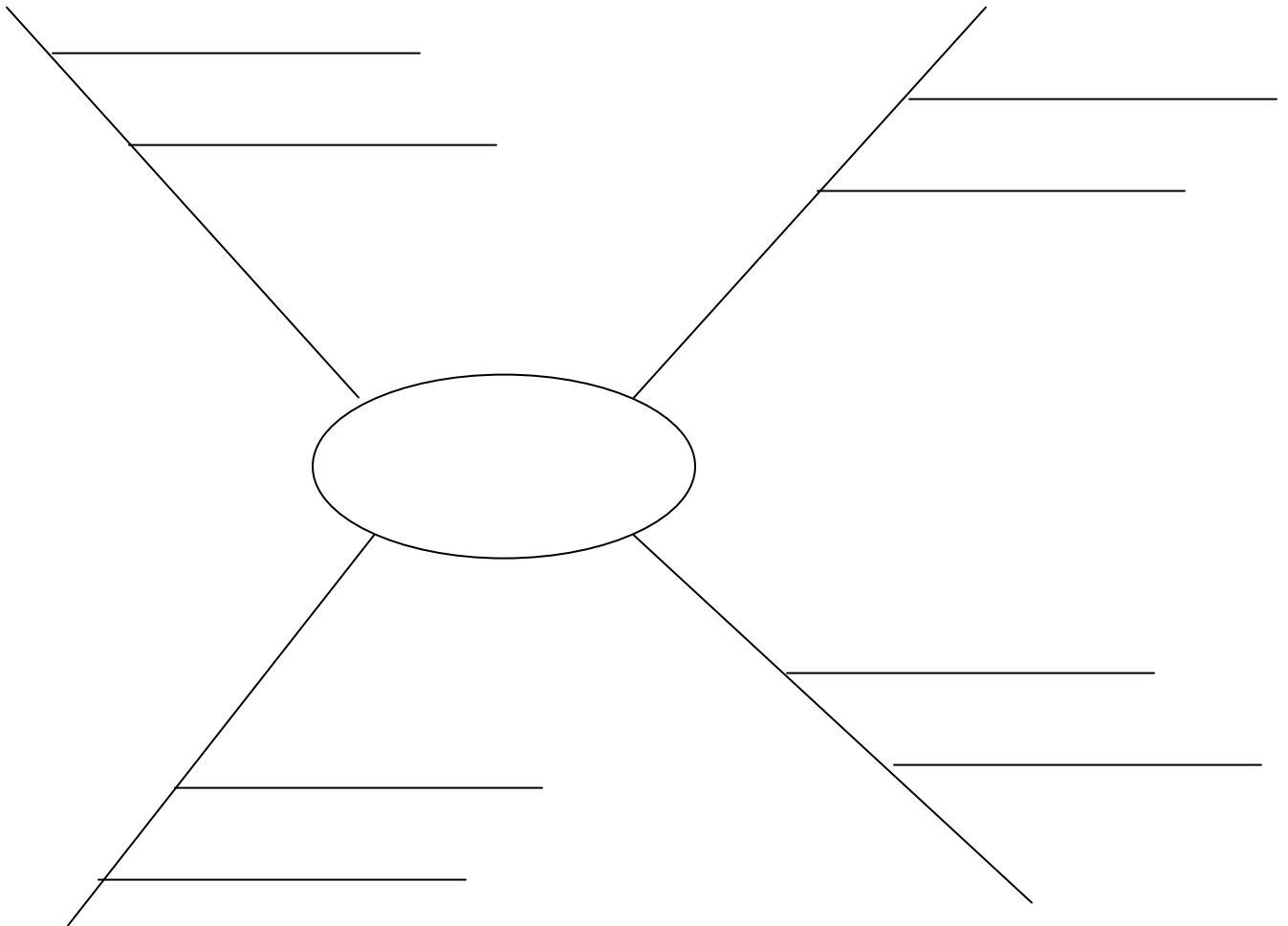
Name _____

Date _____

Class/Subject _____

Teacher _____

Spider Map



Classifying (Spider map) Rubric for the above lesson

4 The student is able to put items into meaningful groups. Tells important characteristics for each group. Is able to make conclusions. Illustrates items with correct picture or drawing.

3 The student put the items into meaningful groups. The student tells the importance of each group. Is able to make conclusion but support is minimal. Illustrates items with correct pictures or drawings.

2 The student put the items into groups. Some ≤ 2 are not classified correctly. Student addresses some characteristics. Does not provide picture or drawing for each category.

1 The student organizes the items into the wrong categories >2 . Illustrations not appropriate or correct.

0 The student did not try to do the task.

Teacher comments/feedback

See: A Handbook for Classroom Instruction That Works. *Comparing* (p. 28).

ROBERT J. MARZANO, JENNIFER S. NORFORD, DIANE E. PAYNTER, DEBRA J. PICKERING, BARBARA B. GADDY . (2001). ASCD, Alexandria, Virginia

For the teacher: Assessing myself – Classifying

On a scale of 0 to 4 answer the following:

0 (not at all).....4(to a great extent)

1. I clearly communicate the knowledge students will use for the classifying activity.
2. I make sure students know how to use the process of classifying.
3. I make sure students understand the graphic organizers for classifying.
4. I give students an appropriate amount of guidance for the activity.
5. Over time, I collect evidence about my students' proficiency at using the process of classifying.

Metaphors and analogies:

A metaphor is a comparison. A metaphor establishes a relationship at once; it does not use “like,” or “as.” A simile uses “like and as.” You use two nouns and compare or contrast them to one another.

- Examples: (see) http://knowgramming.com/metaphor_lists.htm

Grill: *The lawyer grilled the witness on the stand.* Tough questions create a damaging level of heat that makes physical contact.

Cook: *He knew he was cooked when he saw his boss standing at the desk.* Cooked is caught or responsible for wrongdoing, as if prior to being caught, one is raw or unfinished.

Toast: *He knew he was going to be toast when he got home.* Anger is heat that burns its target.

Singe: *Feel the singe of rejection.* Rejection causes superficial burns on the mind (compare to grill or cook).

Fry: *She knew she was fried when the teacher handed back her paper.* Like grill, this involves higher temperatures.

Darken: *The skies of his future began to darken.* Darkness is a threat.

Weather: *His face was weathered by a long, troubled life.* Bad events wear the youth from our face.

Storm: *She was unsure if her proposal could weather the storm of scrutiny.* Scrutiny is harsh weather to one's ideas.

File: A corrupt *file* wreaks havoc on the computer. Data is physical and discrete, occupying space.

Folder: A *folder* may have any number of files within. Files are objects that can be grouped.

Space: I've not much space left on my hard drive. Data takes up finite physical space.

Port: A *port* is a transfer point for shipping data. Data transfers on a liquid.

Tools: A program's *tools* never need sharpening! Data is physically altered by a program.

An analogy is a similarity between like features of two things, on which a comparison may be based: the analogy between the heart and a pump. It is a resemblance of relations; an agreement or likeness between things in some circumstances or effects, when the things are otherwise entirely different. If they are different, what makes them alike?

<http://www.factmonster.com/spot/analogy.html>

- Examples: (see) page 13 from <http://harcourtassessment.com/NR/rdonlyres/17D54A0A-EEB2-4D23-A4A8-DF536495A5B/0/TheMAT.pdf> MAT Miller Analogies Test
- Thermometer is to temperature as odometer is to distance

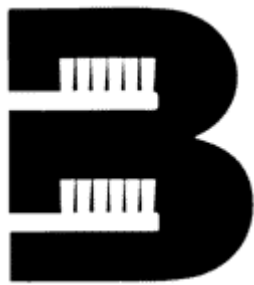
- Hot is to cold as night is to day
- Carpenter is to hammer as painter is to brush

Visual analogy:

<http://graphicdesign.spokanefalls.edu/tutorials/process/visualanalogy/visanalogy.htm>

1. What does this analogy tell you about this person's profession?

Can you *clearly see both* the initial and the symbols?



2. What does the analogy tell you about the product this company manufactures?

Notice how the analogy shape has been *simplified*.



What does Marzano say about using metaphor and analogies?

- Both help us see how seemingly dissimilar things are similar
 - Both increase understanding of new information
 - Both can be teacher-directed or student-directed
 - Students are engaged in learning
 - Use of graphic organizers can play out in many ways in the classroom when identifying similarities and differences
-

Note that an analogy is not quite the same as a [metaphor](#). As Bradford Stull observes in *The Elements of Figurative Language* (Longman, 2002), the analogy "is a figure of language that expresses a set of like relationships among two sets of terms. In essence, the analogy does not claim total identification, which is the property of the metaphor. It claims a similarity of relationships." www.about.com
<http://grammar.about.com/od/rhetoricstyle/f/qanalogy07.htm>

This website

http://classroom.leanderisd.org/webs/marzano/identifying_similarities_and_differences.htm

contains the following information:

Compare /Contrast

- [Compare/ Contrast Chart](#)
- [Comparison-Contrast Charts](#)
- [Compare/ Contrast Diagram](#)
- [Compare/Contrast](#)
- [Compare/ Contrast Tools](#)
- [Comparison Notes](#)
- [Compare and Contrast-Graphic Organizers](#)
- [Double Cell Diagram](#)
- [Basic Venn Diagram 1](#)
- [Basic Venn Diagram 2](#)
- [Venn Diagram with Summary](#)
- [Venn Variations](#)
- [Online Venn Diagram Maker](#)
- [Expanded Venn Diagram 1](#)
- [Expanded Venn Diagram 2](#)

Classify

- [Comparison Matrix](#)
- [Comparison Matrix](#)
- [Synectics Graphic Organizers](#)
- [Semantic Feature Analysis](#)
- [Fact vs. Opinion](#)

Creating metaphors

- [Using Metaphors](#)
- [Writing Metaphors](#)
- [Metaphors and Similies: BrainPOP](#)
- [Metaphor Analysis](#)
- [Metaphors for Expressing Feelings](#)

Creating analogies

- [What is an analogy?](#)
- [Using Analogies](#)
- [Metaphor for the Brain](#)

Lesson Examples

Visit some of these websites to gather some lesson ideas on teaching similarities and differences.

- [Compare/ Contrast Guide](#)

Click on the tabs at the top of the page to see the different areas.

- [Enchanted Learning](#)
- [Arthur H-Map Compare/ Contrast](#)
- [Whale Lesson](#)
- [Compare/Contrast Revolution and Vietnam Wars](#)
- [Teaching The Compare/Contrast Essay](#)
- [Lesson Ideas for Graphic Organizers](#)
- [Compare and Contrast](#)
- [Expanded Venn Diagram](#)
- [Read and listen to online stories and complete activity](#)
- [Comparing and Contrasting Journals](#)
- [Examining Plot Conflict through a Comparison/Contrast Essay](#)

Technology Connections

Student Templates

Microsoft Word

- [Analogy Graphic Organizer](#)
- [Metaphor Graphic Organizer](#)

- [Comparison Matrix](#)
- [Metaphor Graphic Organizer](#)
- [Venn Diagram](#)

Excel Templates

- [Comparison Matrix](#)

Sample English lesson using Metaphors

From the J. P. Getty Museum Education Department

Title: About Life, the Photographs of Dorothea Lange

“The use of metaphor as a teaching tool has a long history. As teachers, we use metaphor regularly (often unconsciously) to explain ideas, insights, and abstractions. Metaphorical thinking is the ability to make connections between two unlike things, by recognizing an inherent similarity or a common trait.”

From: The Magic of Metaphors. <http://volcano.und.nodak.edu/vwdocs/msh/llc/is/mom.html>

Image as metaphor:

http://www.getty.edu/education/for_teachers/curricula/dorothea_lange/lange_lesson10.html

Grades: Middle school (6–8), High school (9–12)

Subjects: English-Language Arts

Time required: 2–3 class periods

Author: Steven Gee, English Teacher, Fairfax Senior High School Magnet Center for the Visual Arts, Los Angeles, with J. Paul Getty Museum Education Staff

Featured Getty Artwork:

Indonesia by Dorothea Lange



Lesson Overview:

Students define metaphor and discuss its use in writing and visually. Students develop a personal metaphor and use it to write about their own experience.

Learning Objectives:

- Students will define “metaphor” and discuss examples of it in writing.
- Students will look carefully at a photograph by Dorothea Lange and discuss its relationship to the concept of metaphor.
- Students will write effectively about their own experience, picking an object to serve as a personal metaphor.
- Students will produce a work of art that expresses visually what they expressed in writing.
- Students will orally present their personal metaphor and discuss how it reflects who they are.

Materials Required:

- Writing paper
- 11-x-14-inch paper for artwork

Steps:

Day 1: Have a ten-minute discussion to define the terms “metaphor” (a direct comparison of two unlike things) and “symbolism” (for example, an object or person that stands for or represents something else and often can express multiple meanings), providing examples from current classroom reading. The discussion should focus on how a metaphor is a descriptive symbol for another thing. Ask students for other examples they are familiar with. Even if students are already familiar with the term, have this discussion so that comparison can be made to Lange’s use of metaphor in a visual form.

Using the photo-analysis questions below, students discuss the Lange photograph *Indonesia*, considering both the image and the title, to explore how the image is a metaphor.

- What do you see, think, and feel when you look at this photograph?
- What sort of response do you think Lange wanted you to have?
- How did Lange “frame” her picture of these children?
- What patterns or repeating motifs can you find in this picture?
- Why do you think that Lange included only her subjects’ feet in this picture?
- What can you say about the people in this photograph just by looking at their feet?
- What is the relationship between the feet and the title of the photograph? What do the feet tell you about Indonesia?

Provide information on Lange's life, available in Lange's Biography on [getty.edu](http://www.getty.edu/education/for_teachers/curricula/dorothea_lange/background1.html) (http://www.getty.edu/education/for_teachers/curricula/dorothea_lange/background1.html). Why do you think she might have been especially interested in feet?

What elements make feet either an accurate or an inaccurate gauge of who someone is?

Have students discuss the differences and similarities between written and visual metaphors. Is one more telling or powerful than the other, or do they both have unique strengths? If they were going to express Lange's metaphor in words, how would that read?

Day 2: Have students write for ten to fifteen minutes to begin to develop a concept for a personal metaphor. Students may write either in journals or on single sheets of paper. Questions to get them thinking include:

- **What hobbies do you have?**
- What items or objects do you collect?
- What events in your life have had a profound effect on you?
- To what things in your life do you feel a special connection?
- Pick one object to stand as a metaphor for you and write about why this object symbolizes you. Or pick an event in your life that you can represent metaphorically.

Have students read what they wrote and discuss their responses.

Day 3: Give students an 11-x-14-inch sheet of paper and explain that they will visually express the personal metaphor they previously developed.

Give students the option of finding ready-made imagery by clipping or photocopying from a magazine, newspaper, Internet site, photograph, or book, or by drawing their response using pastels or colored pencils (if available).

Ask students to arrange and affix the images to the paper, and include a title written directly on the collage/visual. Have them think creatively about how to include the title. It may simply be a caption in the corner, or it may be incorporated into the image in some way.

Have students write two to three paragraphs that answer some or all of the following questions:

- Why does this object represent you or the event in your life?
- How did you decide to choose this particular object or group of images?
- Can you pinpoint the exact aspect or quality of the object that compels you?

- What emotions do you feel when you see this object?
- How long has this object been something you relate to?
- Is there any past experience or event in your life that gave this object special significance?
- What might this metaphor tell others about you?

Have students make an oral presentation about their work of art and their writing, discussing how the two things relate.

Assessment:

- Teacher observation of student discussion and work.
- Students should demonstrate ability to discuss Lange's photograph in relation to the concept of metaphor.
- Verbally and in writing, students should be able to define and give an example of metaphor, creating their own work of art that expresses this concept.

Extensions:

- Have students interview others to find out what they consider to be their personal metaphor/symbol.
- Have students research a historical or contemporary figure and create a visual metaphor/symbol for that individual.
- Have students find a metaphor in a poem or other literary work and have them draw on one side what the writer/poet is trying to express and on the other side what the statement would look like if it were to be taken literally.
- Have students clip print ads or record commercials and have them explain how advertisers compare qualities of certain objects/images to their own product.

Reading standards can be met for grades 6-12

Sample Marketing Education Lesson Plan

Using Metaphors

Your turn (workshop participant)

As Marketing teachers we too use metaphors regularly to explain ideas, concepts and to get students to think. Using the Marketing Essentials (2006) textbook, let's develop a:

Simple lesson on: "Product Planning, using metaphors" to include a graphic organizer.

Title: Product Planning for Johnson & Johnson

Subject: Small Business (6615)

Grades: 11-12

Time: 2 (90 minute) class periods

Resources: Marketing Essential text, Use of internet

NCSOS: 7.00 Identify product decisions necessary for a small business.

7.01 Explain products/services that make up the product mix.

Teach/explain/discuss: Key terms

Product/service planning: The process of developing the product/service mix for a business by incorporating decisions relating to market opportunities.

Product item, Product length/depth, Product line, Product mix, Product mix strategy, Product width/breadth

Reading: Pages 634 – 635 Marketing Essentials text

Teacher Input: Teacher will introduce the company Johnson & Johnson (review the term corporation)

Did you know...? In the late 1880's, Johnson & Johnson started making surgical dressings as a means of combating deadly post-operative infections. The invention, a major leap forward in hospital care, was based on the work of English surgeon Sir Joseph Lister, who used the metaphor "*invisible assassins*" when describing airborne germs. About a century after Johnson & Johnson first formed, a charitable music group also formed, aimed at famine relief in Ethiopia. The name *Band-Aid* was chosen, a metaphor for its efforts to help heal a sick nation. http://knowgramming.com/family_metaphors.htm

At this point: Teacher to explain metaphors. Provide a few more and continue with J & J's product mix. See: http://knowgramming.com/family_metaphors.htm

"The Johnson & Johnson *Family* of Companies". Companies can grow into families.

*Here's a list of members in the Johnson and Johnson **Family** of Companies, makers of Band-Aid Brand Adhesive Bandages, among many, many other products. Where you see the words "a Division of...", you see the child of a parent company.*

Have students go to http://knowgramming.com/family_metaphors.htm

Here they will see a complete list of The Johnson and Johnson Family

- Veridex, L.L.C., a Division of Ortho-Clinical Diagnostics, Inc.

Process: Students will (after reading and discussion of key terms and concepts) develop a classifying chart (graphic organizer) showing the Product mix for Johnson & Johnson. Teacher will guide students through the process. This will be a cooperative learning exercise. Students to be put in groups of 2 -3, given poster board paper, ruler/yard sticks, markers, old magazines, computer (technology) to obtain the following information: J&J's product lines, items, product width and product depth.

Students will go to:

<http://www.jnj.com/connect/>

Click on Products. Explain to students that because J&J has an extensive product mix, we will select "Consumer Products Category." Review the term "consumer products"

- 1. Students are to count to product lines. Answer (8)**
- 2. Students will begin developing classifying chart. How many columns? (8) Why (8)? Refer back to question #1. Explain to students that the number of lines in a product mix is its width. Therefore class, how wide is the Consumer products mix? Answer (8).**
- 3. Students are to list the product items in each line. Check for understanding by asking: How many items are under the "Baby Care" line? Answer (11). Explain to the students that the number of items in each line is its "depth". Therefore students,**

Marketing lesson plan using analogies

Title: Economics is to?

NCSOC: 3.00 Understanding economic principles and concepts fundamental to marketing

3.04 Compare economic systems and political systems

Technology: Use of LCD projector and power point

Reading strategy: Understanding the relationship among words and guided reading and summarizing procedure (GRASP)

- 1. Review from previous lesson**
- 2. Reading from text pp. 57-59 using GRASP**
- 3. Reinforce reading with curriculum power point for 3.04**
- 4. Check for understanding of key terms**
- 5. Explain to students that analogies are a comparison of two similar concepts. They are like mathematical equations and must be balanced. For examples: March is to Spring as December is to Winter (analogy dealing with time). Battery is to flashlight as hard drive is to computer (analogy dealing with part to whole). Poverty is to wealth as sickness is to health (analogy as antonym). Make sure students get a copy of these and a few other examples. Check for understanding by having students to verbally do analogies –teacher provide partially completed example from previous lesson 3.03 (review business cycles) Expansion is to low unemployment as depression is to high unemployment. Now write out an analogy using the single colon (:) to mean *is to* and the double colon (::) to mean *as*.**
- 6. Encourage students to talk about relationships (may be done as a class or in pairs)**
- 7. Students are to complete the following exercise about Economic/political systems in order to enhance their understanding of vocabulary and concept knowledge. See on following page. Student must come up with several analogies independently.**
- 8. Summarize lesson, evaluate, assess, feedback, closure**

Graphic organizer for Analogies

1.

Capitalism	Is to :	United States
-------------------	--------------------	----------------------

Relationship _____

As::

	Is to :	Cuba
--	--------------------	-------------

2.

Communism	Is to :	North Korea
------------------	--------------------	--------------------

Relationship _____

As::

	Is to :	Japan
--	--------------------	--------------

3.

Communism	Is to	
------------------	------------------	--

Relationship _____

As::

	Is to	Sweden
--	------------------	---------------

4.

Government control of some companies	Is to	
--------------------------------------	-------	--

Relationship _____

As::

Total government control	Is to	
--------------------------	-------	--

5.

Authoritarian		
---------------	--	--

Relationship _____

As::

Democracy		
-----------	--	--

6.

--	--	--

Relationship _____

As::

--	--	--

7.

--	--	--

Relationship _____

As::

--	--	--

8.

--	--	--

Relationship _____

As::

--	--	--

9.

--	--	--

Relationship _____

As::

--	--	--

Rubrics for Analogies (Marzano handbook. p. 50)

Use the following rubrics to assess the lesson on assessment of analogies.

4	Student concisely and accurately states the general pattern of the relationship between the first pair of elements and explains how it relates to the second pair of elements. The explanation shows a complete understanding of the analogy.
3	Student states the general pattern of the relationship between the first two elements and explains how it relates to the second pair of elements. The explanation shows general understanding of the analogy.
2	The student makes mistakes explaining how the first two elements are connected. And/or, makes mistakes explaining how the general pattern applies to the second pair of elements.
1	The student provides unimportant information. The explanations are incorrect and they cannot explain how the first pair of element relates to the second pair of elements.
0	The student does not try the task. There is not enough information provided by the student for the teacher to make a judgment.

Teacher comments:

For the teacher: Planning for Analogies and Metaphors Worksheet

You will be asked to develop a lesson plan pertaining to your content area or courses taught. The lesson plans: (1) for analogies and (1) for metaphors. Prior to developing the lesson please answer the following:

1. What knowledge will students be learning?
2. Do I need to set aside time to teach students the process of creating analogies/metaphors?
3. How will I teach them the process?
4. Will I ask students to use graphic organizers?
5. How much guidance will I provide students?
6. How will students explain their work and communicate their conclusions?
7. How will I monitor how well students are creating and using analogies/metaphors?
8. What will I do to help students who are not creating and using analogies/metaphors effectively?

(Marzano Handbook. p. 51)

(The following evaluation form of this handbook and workshop is from pp. 41;53

Marzano Handbook).

Module (workshop) Evaluation

On a scale of 0-4 please record your thoughts about this handbook and mini-workshop on using Marzano's *Classroom Instruction that Works*.

Reading this information affirms what I already know about analogies

Not at all To a great extent

0 1 2 3 4

Reading this information affirms what I already know about metaphors

Not at all To a great extent

0 1 2 3 4

Taking this workshop helped me to better understand about analogies

Not at all To a great extent

0 1 2 3 4

Taking this workshop helped me to better understand about metaphors

Not at all To a great extent

0 1 2 3 4

I think I will change how I use analogies in my classroom instruction

Not at all To a great extent

0 1 2 3 4

I think that by using analogies, metaphors and graphic organizers in Marketing, I can help students increase their Vocats test scores

Not at all To a great extent
0 1 2 3 4

I think I will change how I use metaphors in my classroom instruction

Not at all To a great extent
0 1 2 3 4

Technology was used in this workshop

Not at all To a great extent
0 1 2 3 4

The presenter made the workshop fun, interesting, and worth taking

Not at all To a great extent
0 1 2 3 4

I would recommend this workshop to a colleague

Not at all To a great extent
0 1 2 3 4

Other comments:

Thank-you