

Word Analogies

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(Developed by Smith, L. & Zygouris-Coe, V., 2008)

"because people by what they understand, are best led to what they understand not"

~ George
Herbert,
"A Priest to
the Temple,
Or, The
Country
Parson"

Rationale:

Whether comparing the concept of cells to building blocks or the term McCarthyism to a Salem witch trial, analogies are excellent tools used to create a bridge between new knowledge and known concepts. "Analogies can serve as early 'mental models' that students can use to form limited but meaningful understandings of complex concepts" (Glynn, 2007). By asking students to consider the relationships between words, teachers can help trigger critical thinking on an abundance of topics and subjects (Vacca & Vacca, 1999).

Word analogies have been found to be useful thinking exercises that require students to draw inferences and offer a way to increase students' vocabulary and comprehension (Readence, Bean, & Baldwin, 1998). As with almost any learning strategy, activating students' prior knowledge is a first step. This can be exceptionally important with analogies. Often seen as an equation found in standardized tests where each side of an analogy is balanced (i.e. Lincoln is to slavery, as Jefferson is to independence), the terms teachers use within an analogy can effect students understanding of the material being covered. Teachers should also remember to give demonstrations on how to successfully analyze an analogy, and model how students can create their own analogies (Vacca & Vacca, 1999).

How to Use the Strategy:

When using analogies in the classroom, teachers should take time to consider particular strategies that will enhance both vocabulary and comprehension. While equation type analogies can be used as bell work or a warm-up exercise, specific strategies such as the Teaching-With-Analogies Model, analogy maps, and analogical guides can be used within a variety of content area subjects in order to support student learning.

Teaching-With-Analogies Model

Developed by Glynn, Duit, & Thiele (1995), the Teaching-With-Analogies Model help teachers use analogies systematically and effectively. Steps to using this model include the following (Glynn, 2007):

1. Introduce the *target concept/word* to students.
2. Remind students of what they know of the *analog concept/word*.
3. Identify relevant features of the target concept/word and analog concept.
4. Connect (map) the similar features of the target concept/word and analog concept/word.
5. Indicate where the analogy between the target and analog concept/word breaks down.
6. Draw conclusions about the target concept/word.

Example:

Subject: History

Target Concept or Word: proletariat

Analog Concept or Word: wage slavery, a term learned in our studies on slavery and the comparison between wage slavery and chattel slavery

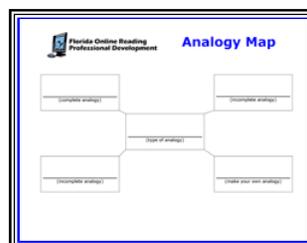
Connections: Proletarians, under Marxism, is the opposite of the *bourgeoisie* (merchant class). The proletariat were defined as those who worked for the bourgeoisie for a wage, while the bourgeoisie got rich by selling the labor or goods created by the proletariat.

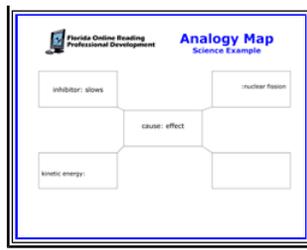
Breakdown: Proletarians were seen originally as those without wealth. Even though somewhat thought as only wage earners, Karl Marx preferred to consider them as salaried workers.

Conclusions: What's important to remember is that a proletariat can be considered similar to a working class/blue collar worker of our time. They work for a wage or salary, but their work is sold by others to make a profit for themselves.

Analogy Maps

Using analogy maps can be helpful in assisting students to have a visual to use when looking for relationships. Dwyer (1998) suggests using a complete example, two incomplete example for the student to complete, and one space for an example from the student. See below for a useful handout and example.





Analogical Guides

Analogical guides can be created by both teachers and students in lieu of a study guide. Analogies lend themselves well to helping students not only understand basic concepts, but expand their comprehension on more complex and underlying properties of a given topic.

Readence, Bean, and Baldwin (1995) suggest the teacher begin creation of an analogical guide by identifying the key concepts that students will need to understand from the reading. The teacher will then consider appropriate analogies that will enhance a students understanding of the topics. Teachers will then guide students in comparing the concepts and vocabulary to the analogy. The example below compares cells to a factory.

Vocabulary	Meaning	Analogy
cell wall	support and protection	factory walls
cytoplasm	boundary areas	security guards
nucleus	controls	energy generation
vacuoles	storage	warehouses

Assessment:

While creating quizzes that use analogies can be one type of assessment used in the classroom, teachers may want to assist students in creating analogy projects based on a topic, text, or theme. Check out the resources below for ideas on analogy projects and activities. Don't forget to have students take time to describe their analogies and the relationship between the concepts and words.

Cell Analogies Collage

<http://www.accessexcellence.org/AE/ATG/data/released/0164-KatharineNoonan/>

This project challenges students to make 15 original and appropriate functional analogies between cell structures and everyday objects.

Student Interviews Example of Analogical Mapping

http://www.colorado.edu/physics/EducationIssues/analogical_scaffolding_perc_04.pdf

This poster explores a model of learning where students begin by making simple analogies with low levels of abstraction. Simple analogies form an analogical scaffolding that students use to build more complex analogies.

Growing Writers Through Collaboration

<http://www.nwp.org/cs/public/print/resource/2174>

Teacher-consultant Kathy Brody recounts her fourth grade class's inspired collaboration in writing and illustrating Animalogies: A Collection of Animal Analogies, which won Scholastic's Kids Are Authors contest in 2003 and has been published by Scholastic.

Resources:

Using Analogies

http://agpa.uakron.edu/k12/best_practices/using_analogies.html

Analogies can be in classroom instruction to familiarize students with concepts that are abstract and outside their previous experience.

Vocabulary and Analogies for Elementary and Middle Schools

<http://www.wordmasterschallenge.com/elem.htm>

WordMasters Challenge is a national competition for grades 3-8. This challenge encourages growth in vocabulary and verbal reasoning.

501 Word Analogy Questions

<http://www.learnatest.com/Products/1576854221B001.cfm>

501 Word Analogy Questions is a workbook that offers simple and straightforward methods for improvement of vocabulary, logic and reasoning skills.

References:

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Readence, J.E., Bean, T.W., & Baldwin, R.S. (1995). *Content area literacy: An integrated approach* (5th ed.). Dubuque, IA: Kendall/Hunt.

Vacca R., & Vacca, J. (1999). *Content area reading: Literacy and learning across the curriculum* (6th Ed.). Menlo Park, CA: Longman.

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fordp@mail.ucf.edu | (866) 227-7261 (FL only)

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