MAXimize Student Learning:



Reading & Writing Skills in World Geography

Oklahoma Alliance for Geographic Education, Pam Merrill

Lesson Title: MAXimize Student Learning- Reading and Writing in World Geography

Grade Level: 6th and 7th grade World Geography

Overview: As the state of Oklahoma will be implementing Common Core Standards for Literacy in all secondary social studies coursework by 2014, it is imperative for teachers to become familiar with these new standards, including their implications for curriculum and lesson design in the middle school geography classroom. The MAX model (developed by Dr. Mark Forget, MAXTeaching.com) for direct instruction and reinforcement of literacy skills offers an exceptional, practical, and engaging format for assuring that all students become independent and proficient readers and writers about contemporary geographic issues. Information about the MAX Model can be found at <u>www.MAXTeaching.net</u>

National Geographic Standards:

- Standard 4. Places and Regions: The Physical and Human Characteristics of Place
- Standard 6. Places and Regions: How Culture and Experience Influence People's Perceptions of Places and Regions
- Standard 11. Human Systems: The Patterns and Networks of Economic Interdependence on Earth's Surface
- Standard 13. Human Systems: How the Forces of Cooperation and Conflict Among People Influence the Division and Control of Earth's Surface
- Standard 14: Environment and Society: How Human Actions Modify the Physical Environment
- Standard 16: Environment and Society: The Changes that occur in the Meaning, Use, Distribution, and Importance of Resources
- Standard 18. Uses of Geography: How to Apply Geography to Interpret the Present and Plan for the Future

Oklahoma PASS Standards:

- 6.1.1 Locate, gather, and analyze information from primary and secondary sources, such as newspapers and contemporary media.
- 6.1.2 Identify, evaluate, and draw conclusions from different kinds of representations, such as photographs or computer-based technologies.
- 7.2.1 Define the concept of a region and explain how common characteristics can link and divide regions.
- 7.2.2 Identify examples of and reasons for conflict and cooperation among groups, societies, countries, and regions.
- 7.5.2 Evaluate the effects of human modification of and adaptation to the natural environment.
- 7.6.1 Evaluate and draw conclusions from different kinds of maps, graphs, charts, diagrams, and other sources and representations.
- 7.6.3 Analyze local, regional, national, and world policies and problems having spatial dimensions.

Geographic Themes:

Place, Movement, Human-Environment Interaction, Region

Objectives: Students will be introduced to three key phases (preview/motivation, acquisition of knowledge, and extension of learning) necessary for in-depth comprehension of any type of textual information from both primary and/or secondary sources. By utilizing a hands-on case study of the Quechua rural villages of Andean Bolivia, students will experience these three phases, practicing effective research-based strategies and skills. Simultaneously, students will be given the opportunity to examine the interactions of humans who have positively modified their environments in order to satisfy their nutritional needs through somewhat unconventional means.

Materials:

- 1. Student copies of Pre-Learning Checklist
- 2. Student copies reading passage "Pepe Comes to Dinner"
- 3. Photograph Collection of Quechua (one set per pair of students)
- 4. Powerpoint presentation or videoclip "Pepe Comes to Dinner" (optional)
- 5. Five Themes Graphic Organizer chart (one per student)
- 5. Cause-Effect Concept Cards (one set per group of 3-4 students)
- 6. "Cause-Effect" graphic organizer (one per group of 3-4 students)
- 7. Teacher-Completed Cause-Effect graphic organizer (overhead transparency or digital version for classroom display)
- 8. RAFT Writings Brainstorm Chart (four copies)
- 9. Poster-Sized charts (four, labeled according to four RAFT elements)
- 10. Triangle Clue cards (1-2 per student)
- 11. "World Food Crisis" (optional reading passage, one copy per student)

Time Frame: two class periods

Procedure:

Steps 1 and 2 will introduce students to the "Motivation" phase of the MAX Model for Literacy.

1. Without introducing the topic for the lesson, give each pair of students one set of the Quechua photograph collection. Allow time for students to examine what they see, noting common features. Ask student pairs to categorize the photographs according to any categories they wish. (It is recommended that students develop no less than two and no more than four categories.) Student pairs should develop a "title" for each of their categories and report those titles to the class. Conduct a brief classroom discussion giving students the opportunity to predict what the lesson (reading passage) will be about. Note their predictions on chart paper.

2. Give each student a copy of the "Pre-Learning Concept Checklist." Instruct students that they will silently measure what they already know about the key concepts and phrases listed on the checklist. Students should follow the instructions on the checklist, using symbols noting their level of knowledge for each term or phrase. Conduct a brief class discussion, asking students to share what they believe they know about particular terms. For terms not understood by the majority of the class, ask students to predict what the term might mean based on similar familiar vocabulary.

Steps 3 and 4 will introduce students to the "Acquisition" phase of the MAX Model for Literacy.

3. Ask students to return to their partners. Give each student a copy of the reading "Yana Comes to Dinner." Following the instructions found in the "Six-Step Paired Reading & Notetaking" strategy, conduct a "chunky" paired reading exercise for each paragraph of the reading. Pause periodically to ask students to think about their approach to reading and how the process helps them recall important details they wish to retain. Inform them that such mental processes are common in every good reader as they attempt to learn new knowledge from a printed text. Remind students that this is a model they should follow when attempting reading assignments at home.

4. Use the "Yana Comes to Dinner" Powerpoint presentation in order to give students a visual support for the information they have learned from the reading. Remind students of the Five Themes of Geography, using the "Five Themes" graphic organizer. As they view the presentation, ask students to use this organizer to jot down a minimum of one notation per theme. Conduct a brief class discussion to summarize common notations from the students' graphic organizers.

Steps 5 and 6 will introduce students to the "Extension" phase of the MAX Model for Literacy.

5. Remind students that events in world geography are caused by deliberate actions by humans and/or natural processes of the earth. In this case study of Quechua food needs, inform students that they will be asked to identify underlying versus immediate causes the community's decision to raise guinea pigs for food (the "event"). In addition, students will be asked to identify the effects versus long-term impact of this decision. Students are encouraged to re-read the passage, citing evidence that will help them determine such cause-effect relationships.

6. Divide students into groups of 3-4. Give each group a set of "Cause-Effect Concept Cards." Offer students time to review the terms on the cards, determining if each indicates a cause or effect. Encourage students to use their desktops to create a "kinesthetic" graphic organizer as they determine the cause-effect relationships of these terms/concepts. Give each group a blank Cause-Effect graphic organizer. Each group will complete the graphic organizer, using the terms from the Cause-Effect Concept Cards. Conduct a brief class discussion of groups'

conclusion, using a teacher-completed graphic organizer displayed on an overhead or LCD projector.

Assessment:

1. The Common Core Standards for Writing offer extensive opportunities to process new information through various formal and informal writing experiences. Such writing can serve as an extension in the MAX model or as an alternate and more rigorous form of assessment. The RAFT assignment is a proven approach to writing from multiple perspectives, addressing specific audiences beyond the classroom, and utilizing a variety of formats used in everyday written communication. (RAFTs are also engaging strategies to address the need for differentiated instruction in the classroom.)

2. Preparing students to create their own RAFT writing product includes a class brainstorming of potential roles (or authors), their logical audiences, possible formats, and finally, pertinent topics. After this brainstorming of possibilities, students are asked to individually select one role, audience, and topic from those listed. (It is highly recommended for the teacher to determine the format for all students to follow in any first attempt at RAFT writing. However, for ELL and IEP students, a different format may be necessary.)

3. Students are encouraged to share their RAFT compositions aloud to the class. Classmates should be able to easily determine the role, audience, and topic as they hear each RAFT product read aloud. More information and suggestions for using RAFT products can be found at <u>www.ReadWriteThink.org</u>

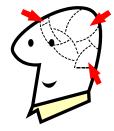
Extension:

1. As an enrichment and vocabulary support strategy, give students a copy of the "World Food Crisis" article. Ask students to read the article, in "chunky" style, using the strategy they learned from step 3 of the lesson. Each student should select a minimum of three geographic-specific vocabulary terms from the reading and develop three "Triangle Clue" cards for these terms. (*Teacher Tip:* When encountering challenging content-specific vocabulary in social studies, the use of student-created Triangle Clue cards is an excellent strategy that builds comprehension of the concept. Application of information gleaned from reading textual passages can also be included in these Triangle Clues cards. To create "Triangle Clue" cards, students must compose three clues- one word or very short phrase- which describe the aspects of the vocabulary term.)

2. When completed, students can exchange cards to quiz themselves, deepening their understanding of complex geographic concepts through exposure to their peers' perspectives. Triangle clues can also be used as a fun "ticket out the door" form of informal assessment at the close of a day's lesson, then utilized the following day by the instructor as a class "warm-up" quiz or as part of a formal assessment. (See examples of multiple choice items using "triangle clues" from this lesson.)

topic, * Establish purpose for actively probing for new knowledge.	* Find out what students already know about the topic, * Help students connect and see relevance or significance of the	Motivation:
 * Read to interpret and gather information, * Students gather information through their own processing new information. 	* Students become active participants in seeking information and consciously monitor their own comprehension.	Acquisition:
* Go beyond the text through various activities, such as: debate, discussion, writing, or other methods for manipulating new ideas.	* Extend their understanding and retain what is learned by evaluating, raising questions, and clarifying information through interaction with peers.	Extension:

PRE-LEARNING CONCEPT CHECK



An effective way to engage students prior to reading or studying a particular subject is to use a pre-learning concept check. Students are asked to questions themselves silently, asking themselves how much they think they already know about the statement, word, or phrase. This strategy helps student measure what they already know, focuses their reading by giving them key ideas to look for, and allows them to measure the growth in their understanding following a reading or period of study.

Procedure:

1. The teacher creates a series of statements, or a series of key concepts (vocabulary words, or key events or personalities) from the reading or from the next lessons (or unit of study).

2. The list is then presented to students in the format of handouts or an overhead transparency, or written on the blackboard.

3. Students individually are asked to measure what they already understand about each statement or concept. Students will make one of three types of marks to the left of each statement, word, or phrase. If they believe themselves to be highly informed, they will place a plus sign (+) in a space next to the statement, word, or phrase. If they know something about the concept, but don't consider themselves to be "experts", they will place a check (\checkmark) in the space. If they know very little or nothing about the statement, word, or phrase, they will place a zero (0) next to it.

4. Students will then engage themselves in acquisition of information or skill through any other strategy the teacher desires.

5. Following acquisition of the information or skill, the student is asked to measure his growth in learning by returning to the pre-learning concept checklist and responding with the same symbols, (as above in step 3.) to the righthand of the statement, word, or phrase, basing his decision on the amount of learning or understanding he believes he has achieved.

6. *<u>Tips for the teacher:</u>*

- A. In creating the statements or key phrases for the checklist, try to include some items which students might have accumulated some prior knowledge through previous studies in the education or through exposure in the home, through the news, television, etc.
- B. Try to include some items that might emphasize common mistakes in understanding, or even stereotypes student might have acquired over the years, which will most likely be dispelled after engaging on the reading or study of the subject.
- C. You may wish to hold a class de-briefing using the checklist as a guide for discussion. Ask students to explain their previous understandings and how they have changed.



Pre-Learning Concept Checklist

Instructions: Before reading, rate your knowledge about each term or phrase with: a plus (+) if you think you are an expert, a check (✓) if you know a little about it, a zero (0) if the statement is new to you.

After reading, you can evaluate yourself again on these statements by using the spaces on the right side.

Before Reading:		After Reading:
	malnutrition	
	Quechua	
	protein	
	fodder	
	infant mortality	
	guinea pigs	
	scarce commodity	
	deforestation	
	soil conservation	
	erosion	
	desertification	
	Andes Mountains	



BUCKET Analysis of Primary Sources

The idea of "bucketing" or classifying primary source documents or visual evidence requires pairs or groups of students to evaluate the common traits, as well as those traits which differentiate one source from the next, in order to create categories in which to "bucket" each source. Through this exercise, students are also required to justify the

reasoning behind the categories they have established, as well as justify why each source was placed in particular categories. This approach is highly interactive and permits students to creatively explore the elements, messages, audiences, and historical perspectives in a collection of primary sources.

Procedure:

- 1. The instructor should collect 6-12 primary sources including visual sources such as art, maps, posters, and/or photographs related to a common historic period of time OR from a common theme in history.
- 2. Allow time for pairs or groups of students to discuss the commonalities of the sources assigned to them. Students should be free to establish as many categories (buckets) they wish, based on any criteria they wish. For example, the sources could be categorized according to historic perspective, message, intended audience, purpose, etc. (A minimum of three buckets is recommended.)
- 3. During the "bucketing" process, student groups should be physically moving the sources into the categories (buckets) on their desks.
- 4. After time is called by the instructor, students should verbally or through a brief writing assignment, explain the categories created, citing examples of particular sources belonging to each "bucket."

Option A:

As an optional exercise, give each group of students a different set of primary sources. After groups determine their "buckets" and then assign each source to a "bucket," exchange the sets of primary sources among different groups. Ask groups to agree to disagree with the buckets developed by the previous group and allow time for groups to verbally defend their "bucketing."

Option B:

For the initial use of this strategy, teachers may wish to tackle the "bucketing" process with the class as a whole examining a set of primary source together, in order to model the process. Also, teachers may wish to pre-establish the categories ("buckets") they wish all groups to use.













YANA ("Helpful One") COMES TO DINNER



Wiscu sits on a barren, treeless and steeply sloping landscape in central Bolivia, nearly 12,000 feet above sea level. Rocky ledges and boulders rise from the thin mountain soil, and it is clear that much of the best soil has long since washed down the hillside.

Wiscu is one of 15 rural Quechua settlements where there are no roads, no electricity, no running water, and no health facilities. Infant malnutrition and mortality is high. This self-help program is an integrated approach, meaning that it addresses problems of health,

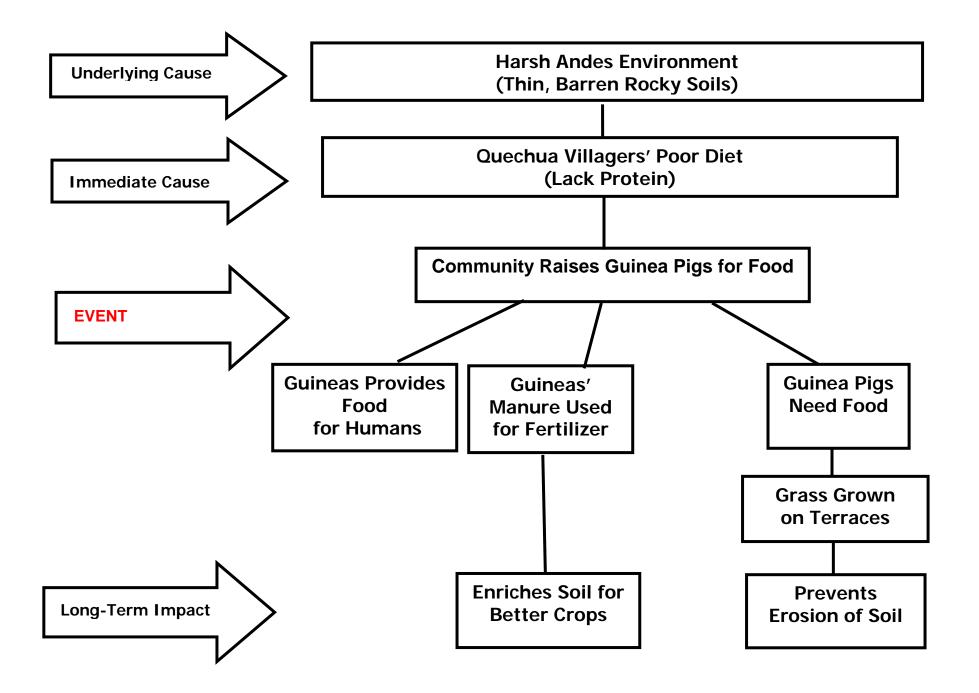
agriculture, and income all at once, taking into account the urgent and interrelated needs of these Quechua-speaking peasant families.

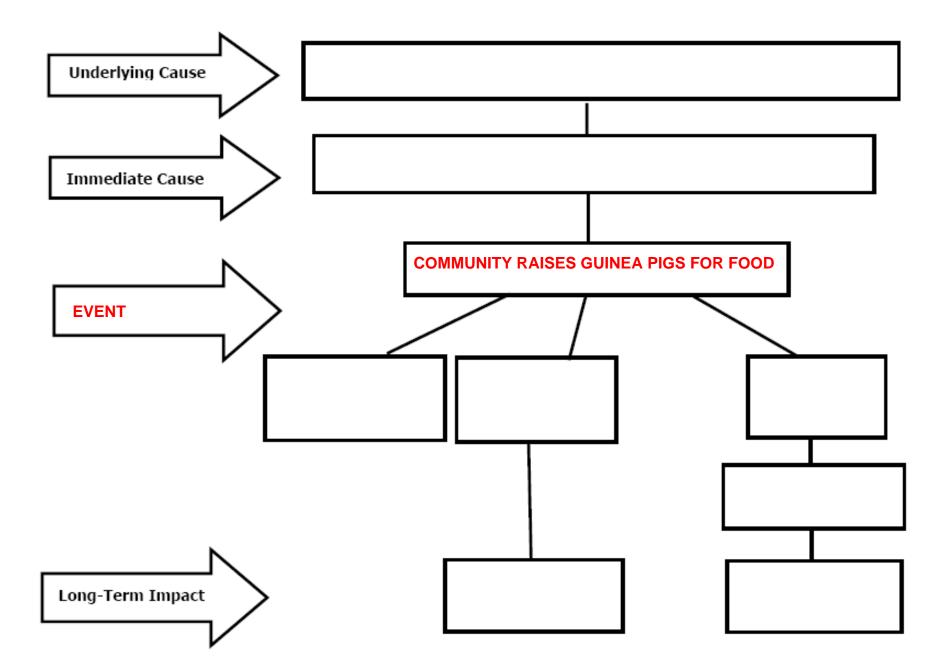
This year, there is a new building in Wiscu, once that serves as a powerful symbol of community cooperation and creativity. The eight-by-twelve foot adobe structure is topped with a corrugated roof and filled with plump, fast-breeding guinea pigs. "We are raising these guinea pigs to improve our nutrition," explains a Wiscu resident.

Guniea pigs, not considered pets in Bolivia, provide villagers with a desperately needed source of protein in a diet that consists largely of potatoes and wheat. Guinea pigs are also low in fat and cholesterol. Though destined for the dinner table, the guinea pigs will also play another part in the community's food cycle- providing manure for crops.

However, the guinea pigs need to eat, too, and fodder for animals is a scarce commodity in the Andes Mountains. The Wiscu villagers have met this challenge through a soil conservation project, in which farmers build contour barriers of fast-growing grass. The grass provides food for the guinea pigs, while the roots keep the soil in place and build up terraces for growing other crops.







DIRECTIONS: Work together to complete the Human-Environment-Interaction graphic organizer using these phrases:

Community Raises Guinea Pigs for Food Harsh Andes Environment (Thin, Barren Rocky Soils) Guineas' Manure Used for Fertilizer Guineas Provides Food for Humans Quechua Villagers' Poor Diet (Lack Protein) Prevents Erosion of Soil Guinea Pigs Need Food Grass Grown on Terraces Enriches Soil for Better Crops Directions:

Cut apart each of the nine cards found here. Organize these cards into a graphic organizer on desktops, according to appropriate "cause-effect" relationships.

Enriches Soil for Better Crops	Prevents Erosion of Soil	Quechua Villagers' Poor Diet (Lack Protein)
Grass Grown on Terraces	Harsh Andes Environment (Thin, Barren, Rocky Soils)	Guineas' Manure Used for Fertilizer
Guineas Provides Food for Humans	Community Raises Guinea Pigs for Food	Guinea Pigs Need Food

SIX-STEP PAIRED NOTE-TAKING



STEPS:	TIPS:	Student Responsibility:	Textbook:
1. READ	Students silently read small "chunk" of text. (Teacher calls "time" after 1 minute.)	Independent	OPEN
2. SUMMARIZE	Partner # 1 verbally summarizes all he/she remembers of importance from the "chunk" of text. (Teacher calls "time" after 1 minute.)	Partner # 1	CLOSED
3. ADD	Partner # 2 may access text to verbally add important information omitted by Partner # 1. (Teacher calls "time" after 30 seconds.)	Partner # 2	OPEN
4. NOTE	Individual students jot down all important information he/she recalls from the "chunk" of text. (Teacher calls time after 1 minute.)	Independent	CLOSED
5. SHARE	Partners share notes, discussing commonalities. (Teacher calls time after 1 minute.)	Partners	CLOSED
6. CHECK	Partners may access text to identify any remaining important information they wish to include in their notes. (Teacher allows for time, as needed before repeating the process for next "chunk" of text.)	Partners	OPEN



"RAFT" Student Products

This is an effective strategy that integrates reading and writing in a non-traditional way. It asks that students take what they have read

and demonstrate their depth of understanding. The RAFT format is flexible and offers limitless opportunities for creativity for both you and your students.

When first using "RAFT" with your students, students are required to develop a product after responding to the specifics for each element in the acronym; they as follows:

<u>Role:</u> In developing the final product, what role will the student "assume"? (Writer? Historic Character? Artist? Politician? Scientist? etc.)

Audience: Who should the student consider as the audience for his/her product? (Other students? Parents? Local community? Other characters in history? Citizens in other nations?)

Format: What is the best product that will demonstrate the student's understanding of the text? (A writing task? Art work? Action plan? Project? Debate? etc.)

Topic: This is the focus/subject of the final product. (Who will be the main focus of the product? What event will constitute the centerpiece of the action?)

R (ROLE)	A (AUDIENCE)
F (FORMAT)	Т (торіс)

Let's brainstorm possibilities for your RAFT writings!

Remember:

R= ROLE

(What roles will you assume as the writer. This affects your viewpoint/perspective toward an event or toward the topic.)

A=AUDIENCE

(To whom will you address your thoughts? How could this affect what you choose to say?)

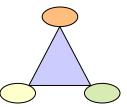
F = FORMAT

(Specific the method you will use to communicate your ideas.)

T= TOPIC

(Define the topic or subject you want to talk about. Think about major points you wish to make.)

TRIANGLE CLUES



Triangle clues, developed by students after modeling by the instructor, are excellent ways to summarize important content and make connections between concepts. Triangle clues are sets of three brief phrases or statements which provide detailed information about a given topic or concept. Students may exchange their sets of "clues" with one another, trying to guess the concept from just the clues given.

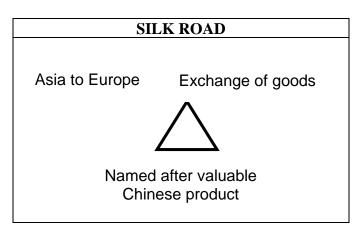
This simple, yet effective strategy can be used for many different types of content, including key historic personalities or historic events (such as "Alexander Hamilton" or "Battle of Vicksburg"), geographic terminology (such as "population density" and "isolines"), geographic concepts (such as "desertification" and "push factors of migration"), economic concepts (such as "consumerism" or "buying on margin").

Students may also be encouraged to combine traditional note-taking, creating very simple graphic organizers from "triangle clues" (see examples below.) Teachers can use student-created clues to develop quality assessment items, as well (see example below). Such a strategy requires both reading comprehension skills, such as summarizing, with deductive reasoning.

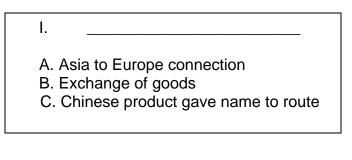
Text or Class Notes	Triangle Clues
I. Silk Road= Trade Route a. Goods left China and went to Central and Southern Asia and Europe b. Private merchants and Chinese officials traveled on the Silk Route c. Took many months to travel	Asia to Europe Exchange of goods
 II. Buddhist Religion Spread with Trade a. Roots in Hinduism b. Belief in Reincarnation c. People worship at many temples offering food, flowers, and prayers along the route d. Founder modeled way of living and treating others; ideas spread through trade 	Founded in Asia Shared Beliefs with Hinduism Ideas influenced distant cultures

 III. Risky Conditions a. Difficult to travel desert regions due to lack of water, intense heat, or rugged mountains b. Camels were used for transporting goods c. Centers of trade established in western Asia and eastern Europe 	Difficult desert and mountainous conditions
became wealthy cities	Centers of wealth grew along trade route

Student-Created Triangle Clues:

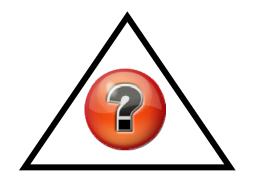


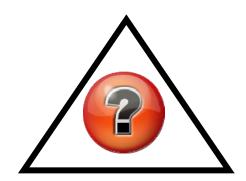
Teacher-created assessment item:

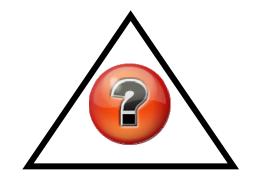


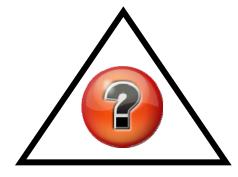
Which of the following best completes the outline above?

- a. Silk Road
- b. Trans-Siberian Railroad
- c. Danube River
- d. Great Leap Forward









WORLD FOOD CRISIS

World food prices have hit an all-time high. Protests over food have recently occurred in many countries, including Ghana, Pakistan, and Haiti. And it's the world's poor who suffer most when global food prices skyrocket. Some food prices rose 40% last year. The United Nations World Food Program fears the world's poorest people will buy less food, less nutritious food, or be forced to rely on more international food aid. The WEP already provides food for almost 73 million people, many of whom live on less than 50 cents a day!

What is causing this global surge in food prices? The surge of the worldwide food crisis and costs is being blamed on many factors. Simplified, the three main contributing factors are competition, distribution, and weather.



Competition for food is increasing. While the poor people of the world, particularly in developing countries, are finding it tougher to purchase food, billions of other people are able to buy ever greater quantities of food. In booming China and India, for example, many people have stopped growing their own food and now have the money to buy more of it in the market place.

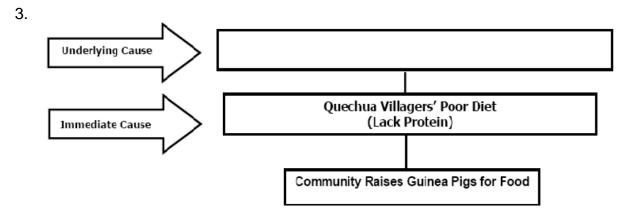
The push to produce biofuels as an alternative to petroleum is further straining food supplies. Where farmers once grew crops for food, many have turned to growing crops for fuel. In the United States, for example, farmers are offered generous subsidies to grow corn for ethanol, further complicating the economics involved in rising food prices.

Food distribution problems around the globe are also playing a role in the recent price surge. A spike in oil prices has pushed up the price of trucking food from farms to local markets and shipping it abroad. Furthermore, weather and climate are affecting food prices, as unusual weather severely disrupted normal harvests. For example, prolonged droughts in Africa and record-breaking heat in Europe have all added up to decreased food supplies.

As richer governments and relief agencies from North American and Europe scramble to feed an increasing population of desperately hungry people around the world, there seem to be few quick solutions to increasing prices. Undoubtedly, the developed world does not want to see a reversal of progress made in the world's poorest regions, but with the number of people confronting hunger increasing, this is what the planet is current facing.

Food Sources: "Yana Comes to Dinner"

- 1. Efforts by many rural Quechua villagers in providing a source of food for their communities is an example of _____.
 - a. cooperation
 - b. migration
 - c. subsistence agriculture
 - d. developed nations
- 2. Many Quechua villages of remote locations in the Andes Mountains of South America have addressed their need for ______by raising guinea pigs commercially.
 - a. reliable sources of protein
 - b. fodder for their livestock
 - c. fossil fuel energy
 - d. education and healthcare

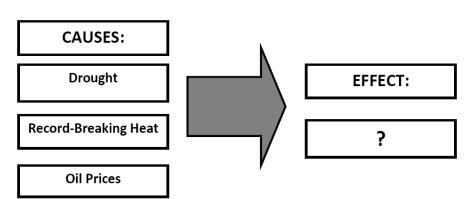


Which of the following best completes the diagram above?

- a. Grass is Grown for Guinea Fodder
- b. Soil is Enriched by Guinea Manure
- c. Illiteracy Rates High Among Quechua
- d. Agriculture Difficult in Andes Environment
- 4. What is an in-direct benefit to raising guinea pigs for a food supply in rural villages of Bolivia?
 - a. increased infant mortality
 - b. prevention of soil erosion
 - c. improved roads and schools
 - d. contact with urban lifestyles

- 5. The Quechua's approach to address multiple problems, such as agriculture, food supply, health, and income, would be considered a(n) _____.
 - a. international food crisis
 - b. integrated self-help program
 - c. large-scale conservation project
 - d. government-sponsored solution





Which of the following best completes the diagram above?

- a. Surplus Food Availability
- b. Global Food Distribution Problems
- c. Increased Fossil Fuel Production
- d. Bio-fuels Replace Food Crops



l._____

A. Farmers are growing alternative crops for fuel

B. People become prosperous enough to buy rather than grow own food

C. Less food is available globally

Which of the following best completes the outline above?

- a. Global Surplus of Food
- b. Decreased International Food Aid
- c. Increased Competition for Food
- d. Inadequate Distribution of Food



The map above indicates that food shortages to due rising costs of food impact which region most severely?

- b. Northern and Eastern Africa d. North America

 - d. North America and Europe

9.

Ι.

A. Crops which can be used as an alternate source for energy

B. Replacing food crops in many regions

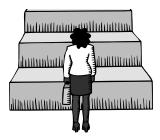
C. Some governments offer subsidies to farmers

Which term best completes the outline above?

- a. bio-fuels c. by-products
- d. subsistence agriculture b. nonrenewable resources

ANSWERS: MULTIPLE CHOICE

1. ANS: A	2.	ANS:	A	3.	ANS: D
4. ANS: B	5.	ANS:	В	6.	ANS: B
7. ANS: C	8.	ANS:	В	9.	ANS: A



How MAX Teaching Works?

MAX is an acronym that stands for the three steps of a teaching framework that any teacher can use. The acronym stands for Motivation, Acquisition, and Extension. It's a way to help students better learn their subject matter and improve their literacy skills. This involves creating a classroom environment

that provides instruction in building skills to enable improved performance, while at the same time engaging all students in active learning from textbooks and from other forms of textual matter.

Motivation:

Each class begins with activities designed to motivate students to become engaged in the learning of content, even if it is content that might not interest them. This first step is accomplished through systematic use of both individual and cooperative activities that help the teacher to:

- Find out what the students already know about the topic to be studied
- Assist students in connecting to and seeing the relevance of subject matter
- Provide for increase conceptual understanding for all students
- Introduce and model a literacy-related skill
- Help students establish concrete purposes for actively probing the text.

Acquisition:

Once students have a clear purpose for learning, the teacher facilitates guided practice in the learning skill introduced in the motivation stage. In the acquisition phase of the lesson, each student:

- Silently reads to interpret and gather information in writing, and
- Actively probes text for new content.

Frequent systematic guided practice in literacy skills allows students to acquire them without even being aware that they are doing so!

Extension:

The final phase of the lesson framework involves extending beyond the text. This takes place through numerous activities that might include debate, discussion, writing, reorganizing, or manipulating the ideas that were confronted in the reading. The teacher acts as a facilitator for the higher order thinking that will allow students to:

- Synthesize information connecting new facts and ideas with what they already know
- Analyze the knowledge newly gains, and
- Think about how to apply what they have learned.

It is through such higher order thinking that students develop the skills and abilities to perform these tasks ion their own as independent life-long learners.

Teachers who use the MAX framework do not need to be reading specialists. Academic teachers need only realize that by using the concrete tools of text and writing, along with teacher modeling and cooperative learning, they can help their students routinely achieve critical analysis of their subject matter. Any teacher can use these techniques.



Autonomous vs. Restricted Learners

The educational system in America expects students to learn, but all too often it does not teach students how to learn. In most classrooms beyond the third grade, the only focus is on teaching the content of a subject area. This content-centered teaching works satisfactorily for those student who are autonomous learners (those who already know how to learn) but it does not work well for

restricted learners (those who lack the requisite skills for learning.)

Autonomous learners know how to apply appropriate skills such as reading for understanding studying, note-taking, and organizing information. Restricted learners, on the other hand, either have not been shown those skills or have failed to learn them. Any teacher, in any classroom, can create a learning environment in which all students are challenged and engaged in the process of learning subject matter at the same time that they are practicing and acquiring literacy skills. Acquisition is a most appropriate term to describe the process of developing learning skills through guided practice in a literacy-based classroom.

The relatively invisible process of acquisition is happening any time student are imitating what strategic readers do all the time- setting purposes for reading, maintaining purposes and monitoring comprehension during reading, then extending beyond the text to process the information. Literacy skills can be described as a broad, closely related and overlapping group of skills including reading, writing, speaking, listening, and thinking. The emphasis should be placed on thinking.

Contrary to much of the recent rhetoric over methods of teaching reading in the early years, reading is not just decoding print. Similarly, writing is not simply a process of putting words onto paper. First, we need to realize that reading is far more than a basic skill. The kind of reading that mature readers do is a complex process. Fluent readers are confident, competent, and independent. They are readers who sample text, predict, confirm and self-correct frequently. They also draw inferences and respond critically to an author's meaning.

Reading involves problem-solving. It involves attempting to get the main idea and hold that idea while perusing more information for detail, comparing, and fitting new information into old.

Studies show that proficient readers are:

- Strategy-oriented. They have a variety of techniques they might use to make sense of some different types of text.
- Metacognitive. They monitor their own understanding while they read and know what to do to fix their comprehension when it fails.
- Engaged in making meaning. They use their own prior knowledge of subject matter to connect with the text.

The operative word here is metacognition- thinking about one's own comprehension during reading- to enhance learning. What MAX Teaching is about is creating the opportunities in the classroom for students to practice metacognitive behavior both individually and cooperatively.



How Teachers Can Use Reading to Teach Content?

There are several reasons why any given teacher may not have already been using reading and writing to learn about content. Many who enter the teaching profession may take literacy skills for granted, not being aware of how they themselves actually acquired the abilities to

read, write, speak, listen, and think critically. Many teachers teach in the same way they were taught, without questioning the classroom activities they observes and internalized.

At the same time, those who have been exposed to different techniques might still be skeptical. We who love our subject matter may not focus on the skills needed to understand that subject matter. We may not have attempted to use these skills because we fear we would be sacrificing time that could be otherwise spent teaching our valuable subject matter.

Research suggest that we remember about 10% of what we read, 20% of what we hear, 30% of what we see, and 70% of what we ourselves discuss. Research also tells us that 85% of the knowledge and skills presented to students in schools comes to us in some form of language- teachers talking or materials to read. If students retain only 20% of what they hear, then is frequent teacher-centered lecturing an effective way to teach and is it an effective use of classtime? On the other hand, if we remember 70% of what we discuss, should interaction with one's peers be the main focus of a classroom?

These same concepts apply to our students. An interactive learning situation is superior to the passive reception of information that characterizes the traditional classroom. When students work cooperatively to construct the meaning from a piece of text, they learn more deeply and they are helping one another learn how to learn. In order to motivate students to think about, learn, and discuss what they have read, we should use a framework of instruction that allows students to be active in their own learning.

Textbooks are valuable tools. Though the textbook should not be the only information source in a class, the textbook is often neglected or a misused tool for learning. The fact is that much content to be learned is found in textbooks, but most students are not exposed to thoughtful interpretation of the text. The fundamental concepts presented in textbooks need to be mastered before advanced thinking can occur. Textbooks can allow for acquisition of important knowledge upon which can be built greater understanding- and without which, higher order thinking will not occur.

Before Reading		After Reading	
What I Think I Know After Previewing the maps, charts, pictures?	Two Questions I Have About What I See?	What I Have Learned: List Two Things	What I Still Have Questions About?



Overview:

This strategy promotes active discussion by using role cards for different skill levels of students in cooperative groups. By focusing on specific tasks required by each of the four roles, students share the responsibility for identifying and processing important information and ideas from a text passage.

Procedure:

1. Before class, make copies of the role cards so that every student in the class can have one card that is appropriate for his/her abilities.

2. Divide the students into groups of four, assigning one of the four role cards for each student in each group.

3. Give students time to read the passage and discuss what they learned, according to the specific tasks on each role card.

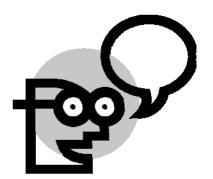
4. Give each group a large sheet of paper and ask them to graphically who the information their learned from their reading.

MAIN IDEA MINDER:



Responsible for telling the main idea of the text.

KEY WORD FINDER:



Responsible for identifying key words in the text and being ready to explain what they mean.

DETAIL DETECTIVE:



Responsible for finding detailed information and examples from the text.

QUESTIONER:



Responsible for generating a question about the text that can be answered by reading the text.

SUMMARIZING WITH SUBTITLES



Title of Cha	
Paragraph	Subtitle Created:
#	(ten words or less)
1-2	
3-4	
5-6	
5.0	
7.0	
7-8	
9-10	

Thinking About....

- ✓ How would these subtitles make the chapter easier to read?
- ✓ How did creating subtitles help you better understand the chapter?
- ✓ What was difficult about creating subtitles?

Cornell Note Taking Method

The Cornell note taking system, developed by former Cornell professor Walter Pauk features three areas. One area is for note taking, one for review notes, and one for summarizing.

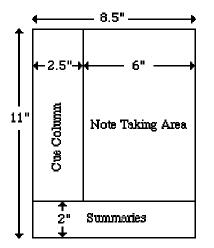
Many times note taking is one of the most difficult things for a student to do effectively. It can be difficult for students to know what to write down, what is important or pertinent information, or how to structure their notes so they are easy to study from in the future. By taking the time to understand why we take notes, how best to do so, and how to use them, we are able to improve our ability to make them truly useful. Notes can be one of the strongest tools a student has in their academic experience.

Before attempting to take notes, consider the following questions:

What is effective note taking? How can I take good notes in class or from written texts? Is it different for each? What is the overall goal of my note taking? How do I study and what should I include in my notes to help this process? How is the class that I am taking taught and how should I take notes based on this?

Why do we take notes?

To summarize. To highlight important information. Most importantly, to review and study from later.



This format provides the perfect opportunity for following through with the 5 R's of note-taking:

Record

During class, record in the main "note-taking" column as many meaningful ideas as you can.

Reduce

As soon after as possible, summarize these facts and ideas concisely in the Cue Column. Summarizing clarifies meanings and relationships, reinforces continuity, and strengthens memory.

Recite

Cover the Note Taking Area, using only what you can see in the Cue Column, recite and explain the information in your own words. Then, verify what you have said by looking at the Note-taking column.

Reflect

Reflect about the information by summarizing the contents of each page. Write your summary in the space at the bottom of each page of notes. Reviewing through summarizing will help prevent information from being soon forgotten.

Review

Spend a few minutes each day to quickly review your notes; you will retain most of what you have learned

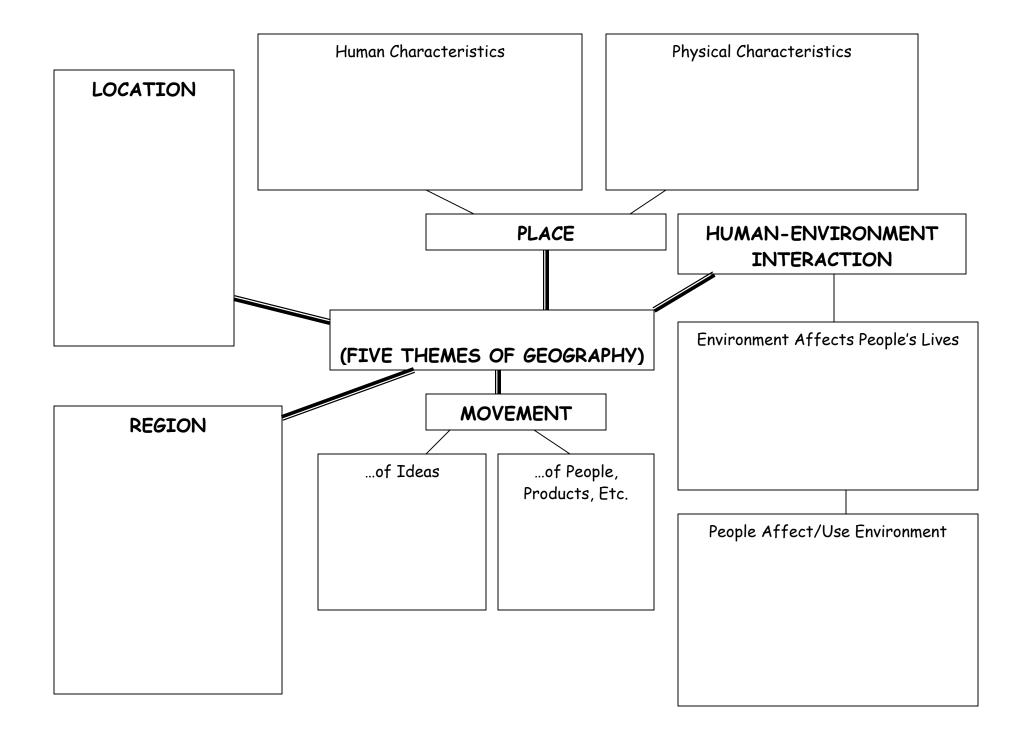
Example - Cornell Note-Taking Format

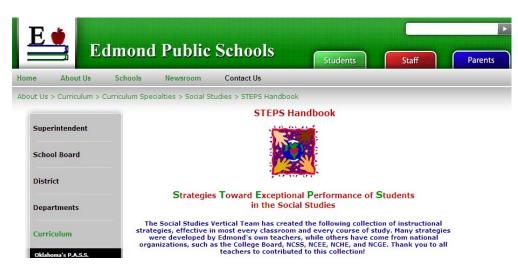
Subject: <u>Notetaking</u>

Main Ideas	Details
Cornell notes	 Can be used to provide an outline of a chapter, lecture, class discussion, etc. Organized by main ideas and details. Can be as detailed as necessary. Sequential take notes in an orderly fashion. After class, write a summary of what you learned to clarify and reinforce learning and to assist retention. Can be used as study tool: List concepts on the left side. Identify the concept and provide details on the right side.
Semantic map or web	 Can be used to provide a "big picture." Organized by main ideas and sub-topics. Limited in how much detail you can represent. Can be used as a study tool to get a quick overview and to determine whether you need more information or need to concentrate your study on specific topics.

Summary:

There are a couple of ways that you can take notes. The Cornell method is best when the information is given in a sequential, orderly fashion and allows for more detail. The semantic web/map method provides a "big picture" when you're previewing materials or getting ready to study for a test.





http://www.edmondschools.net/AboutUs/Curriculum/CurriculumSpecialties/SocialStudies/STE PSHandbook.aspx



www.lexile.com



www.commoncorestandards.org