

SUMMARIZING & NOTE TAKING



Marzano's Strategy



Summarizing

Summarizing involves two highly related elements:

- Filling in missing parts
- Translating information into a synthesized form.



Filling in Missing Parts

As you read the information that you will summarize, your mind naturally fills in information that is unstated.

This information is “inferred”.

Default Inferences are what we expect to happen in a situation unless it is explicitly stated otherwise.



Translating Information Into Synthesized Form

If you were asked to retell this story at a later time, You would probably provide a brief, synthesized version.

This synthesized version is called a macrostructure.



Current Beliefs and Practices about Summarizing

- In what situations is it important for my students to summarize?
- What does summarizing help my students do?
- ☑ *What do I do to help students understand and use the process of summarizing?*
- What questions do I have about using summarizing in my classroom?



Three Recommendations for Classroom Practice

- Teaching students the Rule-Based Summarizing Strategy
- Using Summary Frames
- Teaching Students reciprocal teaching and the group-enhanced summary

Rule Based Summarizing Strategy

Steps for Rule-Based Summarizing	Steps for Rule-Based Summarizing for Younger students
1. Delete Trivial material that is unnecessary to understanding	1. Take out material that is not important for your understanding
2. Delete redundant material	2. Take out words that repeat information
3. Substitute superordinate terms for more specific terms (e.g., use fish for rainbow trout, salmon, & halibut).	3. Replace a list of things with a word that describes the things in the list (e.g., use trees for oak, elm, & maple)
4. Select a topic sentence, or invent one if it is missing	4. Find a topic sentence. If you cannot find a topic sentence, make one up.

Adapted from Brown, Campione, & Day (1981)



Summary Frames Strategy

1. Narrative or story
2. Topic-Restriction-Illustration (T-R-I)
3. Definition
4. Argumentation
5. Problem or Solution
6. Conversation



1. Narrative Frame

- Who are the main characters? What are their characteristics?
- When and where did the story take place? What were the circumstances?
- What prompted the action in the story
- How do the main characters react emotionally to what happens at the start of the story?
- What did the main characters decide to do? Did they set a goal?
- How did the main characters try to accomplish their goals?
- How does the story turn out? Did the main characters accomplish their goals?

Narrative Story Pattern or Elements

1. Characters: The characteristics of the main characters in the story.
2. Setting: The time, place, and context in which the story took place.
3. Initiating event: The impetus that starts the action rolling in the story.
4. Internal response: How the main characters react emotionally to the initiating event.
5. Goal: What the main characters decide to do as a reaction to the initiating event (sometimes this is the goal they set).
6. Consequence: How the main characters try to accomplish the goal.
7. Resolution: How the goal turns out.

Note: Elements 3-7 are sometimes repeated to create an episode

The Narrative Frame-Guiding questions

1. Who are the main characters? And what distinguishes them from other characters?
2. When and where did the story take place? What were the circumstances?
3. What prompted the action in the story?
4. How did the characters express their feelings?
5. What did the main characters decide to do? Did they set a goal? What was it?
6. How did the main characters try to accomplish their goals?
7. What were the consequences?

Note: Elements 3-7 are sometimes repeated to create an episode



Example of Narrative Frame-Guiding questions – *Jack & the Bean Stalk*

1. Who are the main characters? And what distinguishes them from other characters?

A little boy named Jack, his widowed mother, a mean Giant & the Giant's wife

2. When and where did the story take place? What were the circumstances?

It took place long ago in a little cottage. Jack's mother is ill. They are poor & it has been a long hard winter.

3. What prompted the action in the story?

Jack's mother asks him to take their cow to the market to sell.

4. How did the characters express their feelings/react emotionally at the beginning?

Jack enjoyed going to the market & he was looking forward to taking the cow.

5. What did the main characters decide to do? Did they set a goal? What was it?

Jack will take the cow to sell so that he and his mother can buy food.

6. How did the main characters try to accomplish their goals? *Jack traded his cow for some "magic" beans & his mother gets upset and throws them out the door. A bean stalk grows & Jack climbs it to find a beautiful castle.*

7. What were the consequences? *Jack learns the Giant killed his father. The Giant's wife lets Jack in & he takes gold coins, a hen that lays golden eggs, & a harp that plays beautiful music. The Giant chases Jack & Jack climbs down the bean stalk and chops it down.*

2. Topic-Restriction-Illustration (T-R-I) Frame

The Topic-Restriction-Illustration Pattern <i>Expository tests that fit this pattern commonly include the following elements:</i>	The Topic-Restriction-Illustration Frame <i>Guiding questions for the T-R-I frame:</i>
Topic: A general statement about the topic to be discussed	Topic: What is the general statement or topic?
Restriction: statements that limit the information in some way (narrows or restricts the topic)	Restriction: What information does the author give that narrows or restricts the general statement or topic?
Illustration: statements that exemplify the topic or restriction (examples)	Illustration: What examples does the author give to illustrate the topic or restriction?

Passage for Topic-Restriction- Illustration Frame



Mammals are a group of vertebrate animals --animals with backbones. Mothers nourish baby mammals with milk. Mammals are warm-blooded, which means that they keep their body temperature within a narrow range despite changes in the environment. One sub-group of mammals is the marsupial group. Marsupials give birth to live young, but the babies are still very undeveloped when they are born. Baby marsupials live inside a special pouch on the mother's stomach and feed on milk supplied by her nipples. Kangaroos are one type of marsupial. They live in Australia and on islands close by. Kangaroos use their large back legs and tails for hopping. Another marsupial is the opossum. The Virginia opossum is the only marsupial that lives in North America. Long, shiny white hair and an undercoat of soft, woolly fur cover the Virginia Opossum. An opossum has 50 teeth. It sleeps during he day and hunts food at night.

Example of Topic-Restriction-Illustration Frame

The Topic-Restriction-Illustration Frame

Guiding questions for the T-R-I frame:

Topic: What is the general statement or topic?

Mammals are warm-blooded animals with backbones that are born live and fed with mother's milk.

Restriction: What information does the author give that narrows or restricts the general statement or topic?

Marsupials are one subgroup of mammals.

Illustration: What examples does the author give to illustrate the topic or restriction?

Kangaroos are one kind of marsupial that live in Australia. The Virginia opossum is the only marsupial that lives in North America.



Summary from T-R-I Frame

Summary:

Mammals are warm-blooded animals with backbones. Mothers feed their young with milk. Marsupials are a category of mammals. Two examples of marsupials are the kangaroo and opossum.



3. Definition Frame

The definition pattern <i>Test that follows this pattern typically describes a particular concept and identifies subordinate concepts. This pattern commonly includes the following elements.</i>	The Definition Frame <i>Guiding questions for the definition frame</i>
Term: the subject to be defined	What is being defined?
Set: the general category to which the term belongs	To which general category does the item belong?
Gross Characteristics: those characteristics that separate the term from other elements in the set	What characteristics separate the item from other things in the general category?
Minute differences: the different classes of objects that fall directly beneath the term.	What are some different types or classes of the item being defined?

Passage for Definition Frame

Illustration



Sonnets are lyric poems with 14 lines that follow a formal rhyme scheme. The two major types of sonnets are the Petrarchan (Italian) and the Shakespearean (English).

The Petrarchan sonnet, named for the Italian poet Petrarch, consists of an octave, or eight-line stanza with two quatrains that rhyme *a b b a*, *a b b a*. The first quatrain introduces the theme of the sonnet, and the second quatrain develops the theme. The last six lines form a sestet and rhyme *c d e c d e*, or *c d c d c d*, or *c d e d c e*. The first three lines of the sestet illustrate the theme; the last three lines bring closure to the whole poem. Sir Philip Sidney's *Astrophel and Stella* (1591) exemplifies the Petrarchan sonnet written in English. In the 17th century, John Milton also wrote sonnets based on the Petrarchan form in both English and Italian.

The Shakespearean sonnet, named for the English poet and playwright William Shakespeare, consists of three quatrains, each rhymed differently – *a b a b*, *c d c d*, *e f e f* – and a closing couplet rhymed *g g*. English sonnets written in the 16th century dealt primarily with love, but in the 17th century, writers such as John Donne wrote sonnets that dealt with other subjects. In the 18th century, Romantic poets such as William Wordsworth, Samuel Taylor Coleridge, and Percy Bysshe Shelley revitalized the form. Elizabeth Barrett Browning and Dante Gabriel Rossetti wrote sonnets during the Victorian period.



Example of Definition Frame

The Definition Frame

Guiding questions for the definition frame

What is being defined?

Sonnets

To which general category does the item belong?

The genre poems

What characteristics separate the item from other things in the general category?

Sonnets consist of 14 lines and follow rhyming schemes

What are some different types or classes of the item being defined?

Petrarchan contain an octave and a sestet.(8+6) and Shakespearean sonnets (contain three quatrains and a couplet (4+4+4+2). The last lines in both types of sonnets change in rhyming pattern.



Summary

Summary:

A sonnet is a lyric poem with 14 lines that follows a rhyming scheme. The Petrarchan or Italian sonnet consists of an octave and a sestet. The Shakespearean or English sonnet consists of three quatrains and a couplet.



4. Argumentation Frame

The Argumentation Pattern	The Argumentation Frame
Evidence: <i>Information that leads to a claim</i>	Evidence: <i>Guiding questions for the argumentation frame:</i>
Claim: <i>the assertion that something is true (identify the claim that is the focal point of the argument)</i>	Claim: <i>What does the author assert is true? What basic statement or claim is the focus of the information?</i>
Support: <i>examples of or explanations for the claim</i>	Support: <i>What examples or explanations support the claim?</i>
Qualifier: <i>a restriction on the claim or evidence counter to the claim</i>	Qualifier: <i>What restrictions on the claim, or evidence counter to the claim, are presented?</i>

Passage for Argumentation

Frame



State and local parks, recreation facilities, wildlife habitats, and open-space initiatives benefit from the proceeds of our state lottery games. Multistate lotteries involve more players than our state's current lottery games, so they offer potentially bigger pay-offs. They also offer additional funding for state parks, wildlife habitats, and open space. Our state should join a multistate lottery.

Joining a multistate lottery will increase lottery revenues and help our state continue to support our parks, recreation facilities, wildlife habitats, and open space. Further, because a multistate lottery has the potential to generate even more money than the current state lottery, the state will have a source of revenue to spend on health and safety problems in public schools

Now people drive out of state to purchase tickets. The money that our states' citizens spend on lottery games should stay in our state. Also, these multistate lotteries are the only way for people in smaller states, like ours, to win really big jackpots. Tickets to the big lottery games are usually cheap, typically only one dollar, but they give players the potential to win millions of dollars.

Example of an Argumentation Frame

The Argumentation Frame

Evidence: *Guiding questions for the argumentation frame:*

What information does the author present that leads to a claim?

The state benefits from state lottery games and multi-state lottery games offer even more money for state programs.

Claim: *What does the author assert is true? What basic statement or claim is the focus of the information?*

Our state should join a multi-state lottery

Support: *What examples or explanations support the claim?*

Multi-state lotteries will give the state a source of revenue to spend on health and safety problems in public schools. People drive out of state to purchase the tickets anyway & that money should stay in our state.

Qualifier: *What restrictions on the claim, or evidence counter to the claim, are presented?*

Our state already has lottery games.



Summary from Argumentation Frame

Summary:

Although our state already has lottery games, joining a multi-state lottery would provide more benefits to the state. Joining a multi-state lottery would keep more money in the state and allow players to win bigger jackpots.



5. Problem or Solution Frame

Problem or solution pattern: Text that fits this pattern introduces a problem and then identifies one or more solutions. This pattern commonly includes the following elements.	Problem or solution frame: Guiding questions for the problem or solution frame:
Problem: a statement of something that has happened or might happen that is problematic	What is the problem?
Solution: a description of one possible solution	What is a possible solution?
Solution: a description of another possible solution	What is another possible solution?
Solution: a description of another possible solution	What is another possible solution?
Solution: identification of the solution with the greatest chance of success	Which solution has the best chance of succeeding?



Passage for Problem or Solution Frame

Humans are consuming fossil fuels at much faster rates than they are produced in the Earth's crust. Eventually, we will use up these nonrenewable resources. We don't know for certain when the Earth's fossil fuels will be depleted, but we have already seen evidence that certain fossil fuels are being depleted in some regions. For example, the United States' production of crude petroleum was at its highest in 1970. Since that time, the United States has begun importing a higher percentage of petroleum.

Reducing the world's dependence on fossil fuels is problematic. However, there are several alternative energy sources, including nuclear energy, hydroelectric energy, solar energy, and wind energy. These energy sources currently account for only about 14% of the world's energy consumption; therefore, we need to focus efforts on developing these viable alternatives.

Different types of nuclear reactors that use different types of fuel, moderators, and coolants have been built throughout the world to produce electric power. However, public concerns about the safety of nuclear power, risks of accidents,



Passage for Problem or Solution Frame (cont.)

high construction costs, high waste-disposal costs, and strict regulations have hindered the growth of nuclear power as an energy source. In fact, many countries have opted to phase out nuclear power plants altogether.

Falling water is another source of energy used to generate electric power. Hydroelectric power is renewable because of the recurring nature of the hydrologic cycle, and it produces neither thermal nor particulate pollution; however, geography limits the use of hydroelectricity. Large dams are typically used to take advantage of falling water to create hydroelectric power. Countries with mountains that lie close to industrial areas and experience heavy rainfall, such as Norway, Sweden, Canada, and Switzerland, can rely heavily on hydroelectricity. A number of other countries, including the United States, Russia, China, India, and Brazil, also use hydroelectricity, but on a much smaller scale.

Solar energy has enormous potential. Each day, the Earth receives solar energy that is almost 200,000 times the total world electrical-generating capacity. Solar energy itself is free, but collecting, converting, and storing it has limited its use.



Passage for Problem or Solution Frame (cont.)

Wind energy can be converted into mechanical energy to perform work such as pumping water or grinding grain. Modern wind turbines convert wind energy into electrical energy. Wind is a clean and renewable source of energy, so many countries, such as Germany, Denmark, India, China, and the United States, are expanding their use of modern wind turbines. Clusters of individual wind turbines are grouped to form wind power plants, sometimes called “wind farms.” Typically the electricity produced from these “wind farms” supplements more traditional sources of electric power, such as burning coal. Wind energy technology has improved so that modern wind turbines produce electric power as efficiently as other power-generating technologies. Widespread use of wind energy faces obstacles such as suitable terrain, wind conditions, and environmental concerns such as the visual alteration to the landscape, noise from spinning turbine rotors, and impact on wildlife.

There is no clear answer to the diminishing supply of fossil fuels available for energy production. Given the intricacies and limitations of alternative energy sources, the solution for each nation depends on a variety of factors, including geography, citizen concerns, and environmental issues.



Example of a Problem or Solution Frame

Problem or solution frame:

Guiding questions for the problem or solution frame:

What is the problem?

Depletion of fossil fuels

What is a possible solution?

Alternative energy sources, such as nuclear energy

What is another possible solution?

Hydroelectric energy

What is another possible solution?

Solar energy

What is another possible solution?

Wind energy

Which solution has the best chance of succeeding? *The best solution depends on a number of factors, such as geography, resource availability, and environmental concerns.*

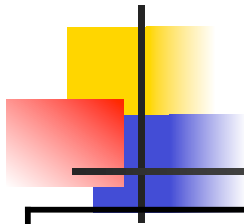


Summary

Summary:

Humans are consuming fossil fuels at much faster rates than they are produced in the Earth's crust. We need to find ways to use alternative energy sources more efficiently. Nuclear energy, hydroelectric energy, solar energy, and wind energy are all possible sources for supplementing and eventually replacing the use of fossil fuels. Development of any of these alternatives faces obstacles and concerns. There is not one correct answer; rather, the solution will be different for different countries.

6. Conversation Frame



The conversation pattern Conversations commonly include the following elements:	The conversation frame Guiding question for the conversation frame:
Greeting: some acknowledgement that the parties have not seen each other for a while	How did the members of the conversation greet each other?
Inquiry: a question about some general or specific topic	What question or topic was insinuated, revealed, or referred to:
Discussion: an elaboration or analysis of the topic. Commonly included in the discussion are one or more of the following: <i>Assertions:</i> statements of facts by the speaker <i>Requests:</i> statements that solicit actions from the listener <i>Promises:</i> statements that assert that the speaker will perform certain actions <i>Demands:</i> statements that identify specific actions to be taken by the listener <i>Threats:</i> statements that specify consequences to the listener if commands are not followed <i>Congratulations:</i> statements that indicate the value the speaker puts on something done by the listener	Did either person state facts: Did either person make a request of the other? Did either person make a promise to perform a certain action? Did either person demand a specific action of the other? Did either person threaten specific consequences if a demand was not met? Did either person indicate that he valued something that the other had done?
Conclusion: the conversation ends in some way	How did the conversation conclude?

Passage for Conversation Frame



Passage from "*Bailey's Café*" (Naylor, 1992)

We've got no menus.

All right, give me a hamburger. Hold the fires.

Hamburgers only on Tuesday.

Some roast beef, then. Make it lean. And...

No roast beef till the weekend.

So what can I get today?

What everybody else is having.

I don't eat corned-beef hash.

That's want we got. And warm peach cobbler.

I'm not eating no hash. How is the peach cobbler?

Divine.



Example of Conversation Frame

How did the members of the conversation greet each other?

A worker in a restaurant told a customer they had no menus.

What question or topic was insinuated, revealed, or referred to?

Ordering something to eat.

How did the discussion progress? Did either person state facts? *The restaurant worker said hamburgers were available only on Tuesday, roast beef was only available on the weekend, and the customer could have what everyone else was eating.*

Did either person make a request of the other? *The customer asked for a hamburger, then some roast beef.*

Did anyone demand a specific action of the other? *No, but the customer stated he would not eat corned-beef hash.*

Did anyone threaten specific consequences if a demand was not met. *No, but the restaurant worker implied that if the customer did not want corned-beef hash, he could go somewhere else to eat. The restaurant worker said that they were serving corned-beef hash and warm peach cobbler.*

Did either person indicate that he/she valued something that the other had done? *The customer asked about the peach cobbler, suggesting that he might want to order some.*

How did the conversation conclude? *The restaurant worker told the customer the peach cobbler is "divine".*



Summary

Summary:

A worker in a restaurant tells a customer that the restaurant has no menus. The restaurant apparently serves only specific foods on certain days of the week. The customer tries to order a hamburger and then roast beef, but is told he can only have corned-beef hash or warm peach cobbler. Finally, the customer asks about the warm peach cobbler.



Reciprocal Teaching and Group Enhanced Summary

Reciprocal teaching incorporates the process of summarizing and engages students in other thinking processes.

In group-enhanced summarizing, students play various roles in the process.



Steps to teach Students Reciprocal teaching & Group Enhanced Summary

1. Summarizing – Students read a short section of a passage. A single student acting as the leader summarizes what was read, heard, or seen. Others with guidance from the leader may add to the summary. *(This might be considered a first draft of the summary)*
2. Questioning – The student leader asks questions that are designed to help students identify important information in the passage.
3. Clarifying – Next, the student leader tries to clarify confusing points in the passage. The leader may ask clarification questions and the group attempts to clear up confusing parts. (may require rereading of passage)
4. Predicting – The student leader asks for predictions about what will happen in the next segment of the text.

(These last three steps help to analyze the information, providing for a group enhanced summary.)

Rubric for Summarizing in the Classroom

Summarizing Rubric	Summarizing Rubric for Younger Students
4 The student identifies the main pattern running through the information along with minor patterns.	4 The student finds the most important pattern in the information. The student also finds less important patterns.
3 The student identifies the main pattern running through the information.	3 The student finds the most important pattern in the information.
2 The students addresses some of the features of the main pattern running through the information, but excludes some critical aspects.	2 The student finds some parts of the most important pattern in the information. The student misses some important parts.
1 The student does not address the main pattern running through the information.	1 The student does not find the most important pattern in the information.
0 Not enough information to make a judgment.	0 The student does not try to do the task.



Planning Worksheet for Summarizing

- What knowledge will students be learning?
- What specific information will I ask students to summarize? (*video, chapter, lecture, story, article, event, other*)
- What strategy will I ask students to use? [*Rule-Based Summarizing Strategy, Summary Frames (Narrative/Story, Topic-Restriction-Illustration, Definition, Argumentation, Problem or Solution, Conversation), Reciprocal Teaching with Group-Enhanced summary Activity, Other*]
- Do I need to set aside time to teach the strategy?
- How much guidance will I provide?
- How will students explain their work and communicate their conclusions?
- How will I monitor how well students are doing with summarizing?
- How will I respond if some students are not summarizing effectively?