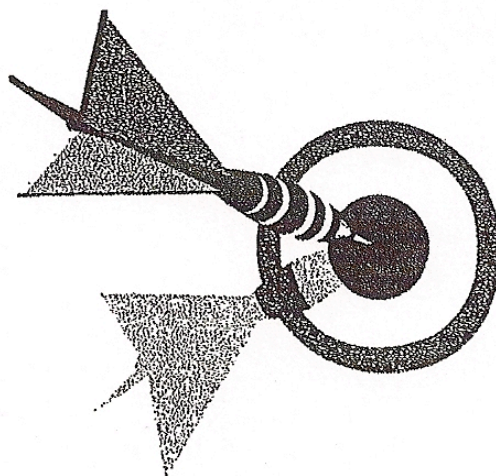


Instructional Strategies That Work: A Tool Kit for Educators

#2: SUMMARIZING and NOTE TAKING



Based on the research and materials of
Dr. Robert Marzano and Dr. Debra Pickering
of the Mid-continent Research for Education and Learning (McREL) Institute
and other sources as noted

Compiled, edited, and expanded by the following Cherry Creek Schools'
S.T.A.R. Mentors: Don Biery, Dina Davis, Roberta Ford, Connie Hirz,
Nan Holt, Valerie James, and Carrie Weinberger.
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SUMMARIZING AND NOTE TAKING

Let's celebrate! The field of education is at a turning point; the "art" of teaching is rapidly becoming the "science" of teaching. This is a relatively new phenomenon as reported by Robert Marzano and Debra Pickering in the ASCD publication, *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement*.

After examining decades of research findings to distill the results, Marzano's team at McRel had defined nine broad K-12 teaching strategies that have positive effects on students' learning:

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Homework and practice
- Nonlinguistic representations
- Cooperative learning
- Setting objectives and providing feedback
- Generating and testing hypotheses
- Questions, cues, and advance organizers

The instructional strategies of summarizing and note taking have proven in research to show a percentile gain of 34 when implemented effectively. Generalizations from research about summarizing and note taking include the following:

- To effectively summarize, students must delete some information, substitute some information, and keep some information.
- To effectively delete, substitute, and keep information, students must analyze the information at a fairly deep level.
- Being aware of the explicit structure of information is an aid to summarizing information.

(Marzano, 30-32)

The intent of the summarizing and note taking packet is to give teachers easy access to classroom strategies and models that easily can be adapted into lessons at all grade levels and in all content areas.

This packet includes the following:

- Steps to the thinking process
- Key points to consider when teaching the processes / concepts
- Models of graphic organizers
- Teacher structured and student structured tasks
- Bibliography

Meta-Analysis of Research On Instruction

	ES	P Gain	N	SD
Identifying similarities and differences	1.61	45	31	.31
Summarizing, note taking	1.00	34	179	.50
Reinforcing effort and providing recognition	.80	29	21	.35
Assigning homework and practice	.77	28	134	.36
Generating non-linguistic representations	.75	27	246	.40
Using cooperative learning	.73	27	122	.40
Setting objectives and providing feedback	.61	23	408	.28
Generating and testing hypotheses	.61	25	63	.79
Providing cues, questions, and advanced Organizers	.59	22	1,251	.26

ES = average effect size.

P Gain = percentile gain (the maximum percentile gains possible for students currently at the 50th percentile).

N = number of effect sizes.

SD = standard deviation (the measure of the variability of scores around the mean).

When conducting a meta-analysis, a researcher translates the results of a given study into a unit of measurement referred to as an effect size. An effect size expresses in standard deviations the difference between the increased or decreased achievement of the experimental group with that of the control group. One of the more useful aspects of an effect size is that it can be easily translated into percentile gains. Being able to translate effect sizes into percentile gains can lead to dramatic interpretations of the possible benefits of a given instructional strategy.

Robert Marzano

from *What Works In Classroom Instruction*, McRel, 2000

SUMMARIZING AND NOTE TAKING

I. **Define Term**

Both summarizing and note taking are skills that ask students to condense the main points of a whole (text, lecture, movie) into a shortened, synthesized form. Summary is generally used when students are engaged with text while note taking is applied to synthesizing either text or lecture.

II. **Give Steps**

A. Summary

1. Identify the type of text (genre) to be summarized.
2. Read the original text.
3. Identify the main idea of the text.
4. Answer any questions appropriate to the type of text being summarized (see summary frames on the following pages).
5. Select or write a topic sentence that states the main idea.
6. Identify which material is essential to the main idea of the text.
7. Delete any material that is not essential to understanding the main idea.
8. Order the remaining information either chronologically or in order of importance.

B. Two Column' Note Taking

1. Fold paper to lined margin on the right side of paper.
2. Do not attempt to write down everything that is said.
3. On the left side of the line write down key points or main ideas.
4. On the right side of the line list examples, supporting details, information, diagrams, or pictorial representations.
5. After the note-taking session, use the bottom of the paper to summarize the main points of the lecture, identify questions, or create visuals to aid memory or understanding.

III. **Demonstrate Model--Summary**

- A. Identify the type of text.
- B. Read the original text.
- C. Identify the main topic of the text
- D. Write a sentence that introduces the main topic of the summary.
- E. Identify any information that is essential to the main idea.
- F. Delete any information that is not essential to understanding the main idea.
- G. Combine and order the remaining information either chronologically or in order of importance. .

Original Text

The giant panda lives in the high mountain forests of Tibet, Nepal and the Szechwan province of China. Few people ever go there. The trees and bamboo are so thick that it is difficult to explore the area, and the mountains are often covered with misty clouds. For hundreds of years, only the people living near these mountains knew about the giant pandas. They called the panda "bei-shung," or "white bear," and believed that these animals and the mountains where they lived were sacred. In 1869, a Frenchman who had come to China as a missionary found out about this unusual animal. Soon, scientists from many countries had heard of the giant panda. Many museums wanted pandas for their collections. They hired hunters to go to China and shoot the animals. Baby pandas were trapped and sent to zoos, but many of them died. By 1950, there were few wild pandas left. The Chinese were afraid that giant pandas would become extinct, and they passed laws against hunting pandas and taking live pandas outside of the country.

Taken from
Comprehension Collection
Beverly Armstrong, 1979 THE LEARNING WORKS

Summary Process

The giant panda lives in the high mountain forests of Tibet, Nepal and the Szechwan province of China. ~~Few people ever go there. The trees and bamboo are so thick that it is difficult to explore the area, and the mountains are often covered with misty clouds.~~ For hundreds of years, only the people living near these mountains knew about the giant pandas. ~~They called the panda "bei-shung," or "white bear," and believed that these animals and the mountains where they lived were sacred.~~ In 1869, a Frenchman who had come to China as a missionary found out about this unusual animal. ~~Soon, scientists from many countries had heard of the giant panda.~~ Many museums wanted pandas for their collections. ~~They hired hunters to go to China and shoot the animals. Baby pandas were trapped and sent to zoos, but many of them died.~~ By 1950, there were few wild pandas left. The Chinese were afraid that giant pandas would become extinct, and they passed laws against hunting pandas and taking live pandas outside of the country.

Summary Paragraph

The Panda is an unusual animal that was unknown outside of China until the 1860s, and became nearly extinct once it was discovered by the rest of the world. The giant panda lives in the high mountain forests of Tibet, Nepal and the Szechwan province of China. For hundreds of years, only the people living near these mountains knew about the giant pandas. In 1869, a Frenchman who had come to China as a missionary found about this unusual animal. Many museums wanted pandas for their collections. By 1950, there were few wild pandas left. The Chinese were afraid that giant pandas would

become extinct, and they passed laws against hunting pandas and taking live pandas outside of the country.

- IV. Discuss key points.** Focus on critical steps and difficult aspects of the process.
- A. Learning how to identify the main idea is a difficult process for students new to a content, skill, or process. Until students have some background knowledge, all pieces of information are of equal importance. It is essential that the teacher models his/her thinking about main ideas as he/she models the processes of summarizing and note taking.
 - B. Notes can be too brief. Students need practice in finding the middle ground between verbatim notes and thorough notes. (Marzano, Pickering and Pollock, 42-43)

Summary Frames

"A summary frame is a series of questions that the teacher provides to students. These questions are designed to highlight the critical elements for specific types of information" (Marzano, Pickering and Pollock 34-35).

The Narrative Frame (used with stories/fiction)

1. Who are the characters? Who are the primary ones?
2. What is the setting--time, place, and circumstances?
3. What is the initiating event-how did events get started?
4. What are the internal responses? How do characters react to the events?
5. What is the goal- the plan for resolution?
6. What are the consequence-how do characters attempt the goals?
7. What is the resolution-how does it all turn out?

(Marzano, Pickering and Pollock, 35)

The Topic Restriction Illustration Frame

T - R - I = topic, restriction and illustration and is usually found in expository material. Its three elements are:

Topic (T) - general statement about the topic

Restriction (R) - limits the information

Illustration (I) - exemplifies the topic or restriction

Example Frame Questions.

Topic - What is the general statement or topic? .

Restriction - What information narrows or restricts the general statement

Illustration - What examples illustrate the topic or restriction?

(Marzano, Pickering and Pollock, 37)

The Definition Frame (used with a particular concept or sub concept)

1. Identify the term. What are we talking about?
2. Determine the set. What category does the item belong to?
3. Define the gross characteristics. How is this item separate from others in the category? What makes it special?
4. What are the minute differences that define this term? Identify objects that fall within this term/category?

(Marzano, Pickering and Pollock, 38)

The Argumentation Frame

Argumentation frames support a claim. They include the following elements:

Evidence - information leading to a belief or idea (claim)

What information is given that leads to a claim?

Claim - a belief that something is true or the central element of the argument

What is the basic focus of the information?

Support - examples or explanations of the claim

What information is given to support this claim?

Qualifier - restrictions on the claim or evidence for the claim

What concessions are made about the claim?

(Marzano, Pickering and Pollock, 39)

The Problem/Solution Frame

"Problem/solution frames introduce a problem and then identify one or more solutions to the problem" *(Marzano, Pickering and Pollock 40)*.

1. Identify the problem.
2. Identify a solution to the problem.
3. Identify another possible solution to the problem
4. If applicable, identify a third solution to the problem.
5. Decide which solution has the most chance of success and why.

The Conversation Frame

"A conversation is a verbal interchange between two or more people" *(Marzano, Pickering and Pollock, 41)*. Conversation frames can be used to help students understand what dialogue reveals about character.

1. How did the characters greet each other?
2. What does that greeting reveal about the relationship between the characters?
3. What was the topic of conversation?
4. During the conversation did either or both parties state facts, make a request, demand, threaten, or value the other.
5. What did the conversation reveal about the characters. Was the tone significant?
6. How did the conversation end?
7. Based on the ending of the conversation what can be predicted about the future relationship(s) between the characters.

Determining Whether or Not You Have Taken Good Notes

When taking notes, certain questions can be asked along the way to determine whether or not note taking is effective.

Do your notes contain the following:

1. legibility?
2. dates, labels and titles?
3. the main idea?
4. subtopics, if needed?
5. words and phrases written in my own words so that I understand the topic?

Other helpful tips for note taking include using loose-leaf paper so that pages can be moved around, using abbreviations, and using graphic representations to help facilitate the speed with which notes are taken.

Maureen E. Auman
Step Up to Writing

SUMMARY RUBRIC

Category	4	3	2	1
Organization	<p>Topic sentence states the main idea.</p> <p>Information is organized within well-organized paragraphs.</p>	<p>Topic sentence states the main idea.</p> <p>Information is organized in paragraphs.</p>	<p>Information is organized but paragraphs are well constructed.</p>	<p>The information appears to be disorganized.</p>
Quality of Information	<p>Information clearly relates to the main topic.</p> <p>It includes necessary supporting details and/or examples.</p>	<p>Information clearly relates to the main topic.</p> <p>It includes necessary supporting details and/or examples.</p> <p>May contain too much or too little information.</p>	<p>Information clearly relates to the main topic.</p> <p>No details or examples are given.</p>	<p>Information has little to do with the main topic.</p>

Note Taking Formats

2 Column Notes

Name:	
_____	• • •
_____	• • •
_____	• • •

Cornell Notes

Name: Date: Subject: Title:	
Questions/Main Ideas (Costa's Levels of Questioning)	Notes
SUMMARY	

Step One		
Topic	Verb	Finish your thought

Step Two

Step Three
❖ _____
❖ _____
❖ _____
❖ _____

Step Four

Step One Write a topic sentence by identifying your topic, selecting a verb and finishing your thought.

Step Two Write the sentence over in complete sentence form. Edit your sentence.

Step Three Create a fact outline.

Step Four Use your outline to write your summary paragraph.

Maureen E. Auman
Step Up To Writing

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