Slide 1

Strategy #8

Synthesizing

Putting It All Together

Slide 2

Synthesis is…

"The process of ordering, recalling, retelling, and recreating into a coherent whole the information with which our minds are bombarded every day. It is the uniquely human trait that permits us to sift through a myriad of details and focus on those pieces we need to know and remember."

(Keene/Zimmerman)

Keene and Zimmerman in *Mosaic of Thought* define synthesis as…
(Read slide).

Slide 3

SYNTHESIZE – Beyond Summary

The putting

together

of parts or

so as to
form a whole

elements
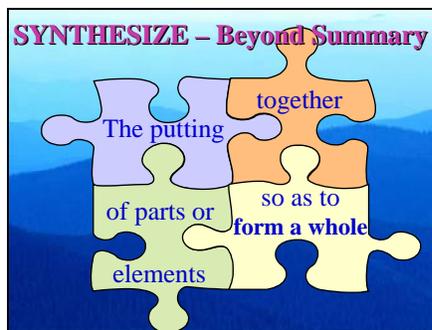
Keene states, *"I combine new ideas with what I already know to get something new and different."*

Slide 4

Let's hear student descriptions about synthesizing recorded by Debbe Miller. *(Allow participants to read the slide.)*

Wording such as:

"Now I understand that..."

"I have learned that…"

"This gives me an idea…"

means synthesizing is taking place.

Slide 5

The conversation that takes place around the dinner table brings in each person's prior knowledge, questions, retelling, and judgments, creating a version different than each individual's version.

Slide 6

When one summarizes, synthesizes, determines importance, or draws conclusions, one is asking a reader to do critical thinking – evaluating credibility, reliability, and aesthetic quality of a work.

Slide 7

Proficient Readers Are…
- Aware of changes in their conclusions about text; actively revising meaning.
- Monitor the overall meaning and themes in text.
- Aware of text elements in fiction: character, setting, and conflict/resolution.
- Aware of text patterns in nonfiction, such as, cause and effect, comparison and contrast, and chronological order.
- Use their knowledge to make decisions about the information in the text.

Keene sees these benchmarks in proficient readers who synthesize.

Slide 8

Synthesizing

1. How is synthesizing important to various content areas?
2. What are the challenges in teaching synthesizing?

Discuss these questions with staff near you. *(Get responses.)*
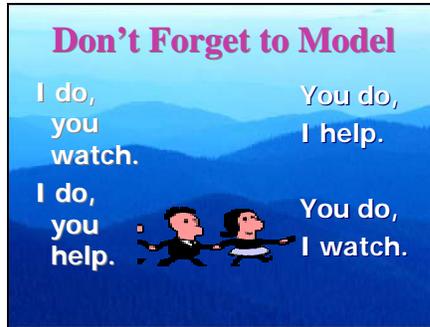
You may have an idea of why it's important, but you do not know how to move your students from simply summarizing to synthesizing. Perhaps some of the ideas that follow will help.
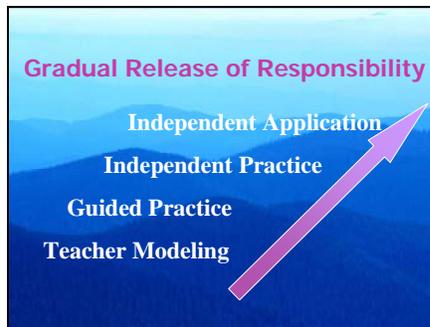
Slide 9

Ways to Synthesize

Slide 10

Don't Forget to Model

I do, you watch.

You do, I help.

I do, you help.

You do, I watch.

As we have discussed in each PowerPoint, a gradual release of responsibility is needed for every strategy. This slide gives us one quick way of saying it.

Slide 11

**Gradual Release of Responsibility**

Independent Application

Independent Practice

Guided Practice

Teacher Modeling

The gradual release of responsibility is incorporated in teaching all the strategies. In the beginning, students are given a great deal of support, and responsibility for learning and working is gradually released to the students. The guided practice or "hand holding" is crucial for learning. We must acknowledge and focus on providing opportunities for guided practice.

Slide 12
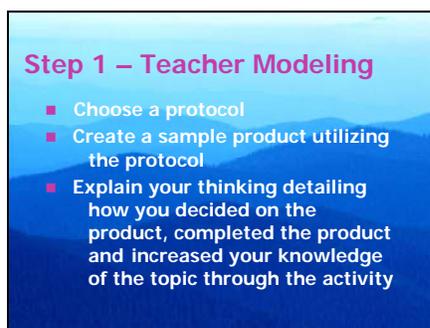
Step 1 – Teacher Modeling

- Choose a protocol
- Create a sample product utilizing the protocol
- Explain your thinking detailing how you decided on the product, completed the product and increased your knowledge of the topic through the activity

With each protocol, show students how to synthesize by providing examples of your thinking and products that illustrate how your thinking has changed based on combining new information from text with other knowledge.
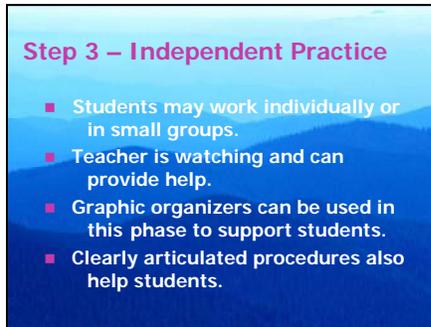
Slide 13
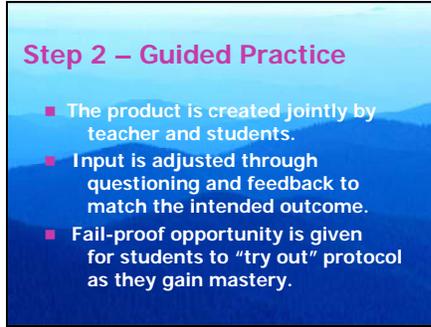
Step 2 – Guided Practice

- The product is created jointly by teacher and students.
- Input is adjusted through questioning and feedback to match the intended outcome.
- Fail-proof opportunity is given for students to "try out" protocol as they gain mastery.
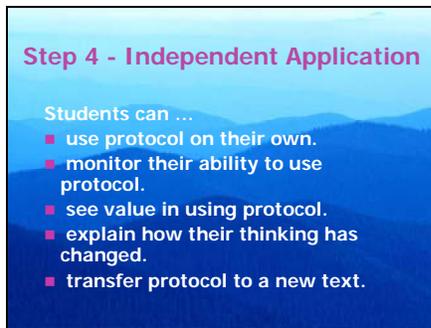
Slide 14

Step 3 – Independent Practice

- Students may work individually or in small groups.
- Teacher is watching and can provide help.
- Graphic organizers can be used in this phase to support students.
- Clearly articulated procedures also help students.

Students use the protocol on their own but are still provided support from peers, teacher and/or anchor charts to guide their efforts. Students are able to show a change in their thinking by combining new information with previously known information.

Slide 15

Step 4 - Independent Application

Students can …
- use protocol on their own.
- monitor their ability to use protocol.
- see value in using protocol.
- explain how their thinking has changed.
- transfer protocol to a new text.

Slide 16

Bloom's Taxonomy

Cues for Synthesis

- Combine
- Integrate
- Modify
- Rearrange
- Substitute
- Plan
- Create
- Design
- Invent
- Compose
- Construct
- Develop
- Organize
- Perform
- Produce
- Propose
- Rewrite

These cues provide a useful structure for teachers to use to draw students into synthesizing.

Slide 17

SPAWN (Special Powers, Problem solving, Alternative viewpoints, What if, and Next)

Goal: Students examine complex issues and extend thinking through writing and discussion.

- Students have read a text, researched a topic or worked with a concept in any content area.
- Students generate responses based on the following questions:
  - Using your *special powers*, how would you change the situation?
  - How would you *problem solve* this situation?
  - Examine the situation from *alternative viewpoints*.
  - *What if* _____ had not happened?
  - What needs to be done *next* ?
- Students discuss their responses with peers.
- Students can create specific prompts for others to respond to using the five categories of SPAWN.

Slide 18

Keeping a Learning Log

Goal: Students track learning over time, revisit goals, and monitor their progress.

- Students reflect on their learning, given a prompt such as "I used the following strategies throughout the reading for the following reasons and in the following ways…"
- Examples are provided to establish a standard
- Goals are developed and recorded in log.

Slide 19

RAFT (Role, Audience, Format, Topic)

Goal: Students use the graphic organizer to produce an imaginative piece of writing after reading.

- Students read about and study a concept or event in any content area.
- Students generate a list of possible responses to the following questions:
  - What *role* is the student assuming as the writer?
  - Who is the identified *audience*?
  - What is the *format* for the written piece?
  - What is the *topic*, questions that are answered, and points that will be made?
- Students select a role, audience, format, and topic and begin writing.

Slide 20

K-W-L

K = What do I know about the topic?
W = What do I want to know?
L = What did I learn?

Goal: Students actively engage before, during, and after reading by recording their thinking on graphic organizer.

K-W-L Plus
Plus = Students synthesize Information recorded in completed K-W-L

B-K-W-L-Q
B=Background knowledge is built and recorded
Q= Questions that result after learning is recorded

adapted from Elkhart Communiy Schools   20

Slide 21

Anticipation Guide

Goal: Students complete the guide to activate background knowledge, build interest about a topic, and engage in further inquiry.

- Teacher constructs several statements related to topic being studied.
- Before reading, students respond to the statements.
- After reading, students revisit statements to clarify, extend, summarize, and synthesize information through discussions with peers.

adapted from Elkhart Communiy Schools   21

Slide 22
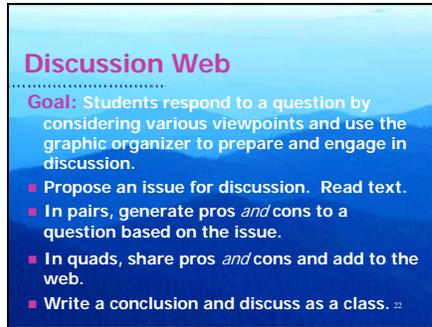
Discussion Web

Goal: Students respond to a question by considering various viewpoints and use the graphic organizer to prepare and engage in discussion.

- Propose an issue for discussion. Read text.
- In pairs, generate pros *and* cons to a question based on the issue.
- In quads, share pros *and* cons and add to the web.
- Write a conclusion and discuss as a class. 22

Slide 23
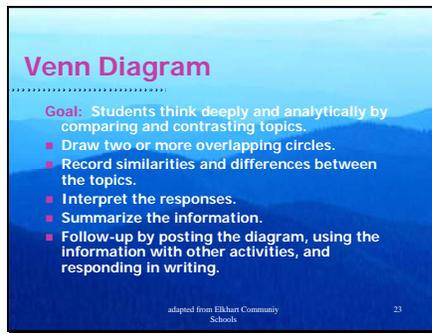
Venn Diagram

Goal: Students think deeply and analytically by comparing and contrasting topics.
- Draw two or more overlapping circles.
- Record similarities and differences between the topics.
- Interpret the responses.
- Summarize the information.
- Follow-up by posting the diagram, using the information with other activities, and responding in writing.

adapted from Elkhart Communiy Schools   23

Slide 24
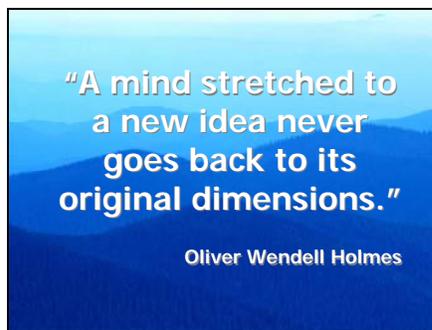
"A mind stretched to a new idea never goes back to its original dimensions."

Oliver Wendell Holmes

According to Harvey and Goudvis, "At its best, synthesis involves merging new information with existing knowledge to create an original idea, see a new perspective, or form a new line of thinking to achieve insight."

Oliver Wendell Holmes states what we hope will happen to all of our readers. Summarizing and synthesizing are worthwhile strategies needed for an ever-changing world.

Slide 25

Synthesizing information aids text comprehension and the reader's ability to *"Connect to the text."*