

Summarizing in All Subjects

Strategies to Improve Student Learning



Content Area Literacy

- **Content literacy is not the same as content knowledge:** It is the skills, not the facts
- **Teaching content automatically makes students more content literate:** "Teachers enhance the ability of students to read and write about content simply by teaching it."
- **Content literacy is content specific:** Just because a student is highly literate in math, does not imply that they will be highly literate in a history class
- **In content literacy, reading and writing are complementary tasks:** Writing can be used before or after reading to activate background knowledge or help synthesize new information
- **Content literacy is germane to all subject areas, not just those relying heavily on printed materials:** Literacy activities specific to the content are in all classrooms, including art, music, and physical education
- **Content literacy does not require content area teachers to instruct students in the mechanics of writing:** "Writing to learn is not learning to write."
- **Content literacy is relative to the tasks expected of students:** Literacy activities must be on the developmental level of the students
- **Content literacy has the potential to maximize content acquisition:** With the proper tools, students will get more out of the text than you thought possible

(McKenna & Robinson, 1990)

"Content area literacy is **cognitive** and **social** practice involving the ability and desire to **read, comprehend, critique** and **write** about **multiple forms of print**. These multiple forms of print include textbooks, novels, magazines, Internet materials and other sociotechnical sign systems conveying information, emotional content, and ideas to be considered from a critical stance."

(Moss 2005)

Comprehension is Based on Summarizing

According to Robert Marzano, as the most cherished skill in the world of language arts, comprehension is also crucial to understanding texts in every other subject area. Although the process of comprehension is complex, at its core, comprehension is based on summarizing—restating content in a succinct manner that highlights the most crucial information.

In a series of studies with teachers, we determined that summarizing strategies have a substantial average effect on student understanding of academic content. Across 17 experimental/ control studies that teachers conducted, we found that using summarizing strategies, on average, increased students' understanding of content by 19 percentile points (see Haystead & Marzano, 2009).

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3-2-1

This strategy is relatively quick and easy to implement in any subject area. It can be used orally, artistically or in written form. It is often used with exit cards in classrooms as well.

Ask your students to write down the numbers 3, 2, and 1 down the left side of their paper, leaving space between each number.

Next, give the students oral or written prompts for each number asking them to write three of something, two of something, and then one of something.

The specific prompts will vary with the lesson content and your instructional goals. Something to consider is making the “one response” prompt more challenging than the “three response” task.

Basic Prompt Example

- 3- things you learned from the lesson
- 2- things you are still confused about
- 1- way you can apply the new learning

Social Studies Example

- 3- Identify three causes of the Texas Revolution
- 2- List two important figures involved
- 1- Explain one way the Revolution might have been avoided

Math Example

- 3- identify three types of angles
- 2- identify two types of lines
- 1- draw one shape and label the angles and lines

Science Example

- 3- Identify three types of renewable resources
- 2- Identify two types of non-renewable resources
- 1- Explain why one type of resource is better than the other

Alternatives

| | | |
|--|---|---|
|  <p>4 things that “square” with your thinking</p> |  <p>3 different angles on the topic</p> |  <p>1 concern that keeps “circling” in your mind</p> |
|--|---|---|

3-2-1

NAME: _____

TITLE & AUTHOR: _____

3 THINGS I LEARNED WHILE READING...

1. _____

2. _____

3. _____

2 INTERESTING FACTS...

1. _____

2. _____

1 QUESTION I STILL HAVE...

1. _____

| | | |
|--------------------------------------|----|----|
| Three new facts I learned... | | |
| 1. | 2. | 3. |
| | | |
| Two ah-ha's that popped into my mind | | |
| 1. | 2. | |
| | | |
| One big question that I still have: | | |
| 1. | | |

Acronyms

Creating acronyms for concepts, topics, sequences and systems is a good way for students to summarize and can be used in any content area.

First, ask students to list the essential characteristics of the topic or concept they are learning about.

Then, ask students to look at each characteristic and identify one term or a key word they can use to remember that characteristic. This step can be completed collaboratively.

Next, sequence the letters in an order that makes sense. Students can move letters around until something makes sense.

If students are struggling, they might need to identify a different key word which could lead to a stronger acronym for them to remember.

Examples of Acronyms Used in Chats

BRB- Be Right Back

BTW- By the Way

IDK- I Don't Know

OMG- Oh My God

Examples of Acronyms Used in the Military

AWOL- Absent Without Leave

CIA- Central Intelligence Agency

Other Examples

ROYGBIV- colors of the rainbow (red, orange, yellow, green, blue, indigo and violet)

HTML- Hypertext Markup Language

Reverse Summaries

The idea of reverse summaries is to have students start with the final product, the “big idea”, and then proceed to explore the smaller components. While doing this, the students are also studying the components and working towards the “big idea”.

Give students the final version, or summary, of the content you are learning about. Next, ask the students to work backwards to identify the parts of the whole, or the components that led to the final version.

When students bring these pieces together, they can analyze and discover more about the process and gain invaluable understanding.

English Language Arts/Writing Example

In the ELA writing classroom, students are asked to use various text structures to write an essay while incorporating the expected components for each genre of writing in order to produce a final product. Often, students are overwhelmed or lack understanding of all the components such as a topic sentence, main reasons with supporting evidence, etc.

Often, it is more beneficial to give students a completed essay and ask them to work in reverse to identify the expected components that should be included. This allows students to see the “whole” and work backwards so they gain a stronger understanding of the process.

English Language Arts/Reading Example

Students are often asked to write a summary about a chapter, book or article that they have read. While reverse summarizing, the students would be given the summary and then asked to explore the smaller components, or information, that were used to create the summary.

Summary Cubes using Bloom's Taxonomy

The summary cubes provide a creative, hands-on activity to support review and reflection and keeps those students who respond to kinesthetic activities engaged.

Give each students or groups of students a large poster board along with other materials they will need to assemble their cube. They will write down one of the Taxonomy Levels on each side of the cube (recall, comprehension, application, analysis, synthesis and evaluation) in small print.

They should use the list provided, or a similar list located from the Internet, and choose a way to express what they have learned about a topic for each level of Bloom's Taxonomy.

Remember to allow students to select various ways to express their responses including written, artistic or oral response.

You could also select fewer prompts for each level or be more specific about what topics should be responded to for each level. You could also differentiate by challenging students or groups to create their own prompt based on their understanding of Bloom's Taxonomy.

Another variation is to use Costa's Levels of Questioning.

Social Studies Example (The American Revolution)

Recall: Define a revolution.

Comprehension: Explain the Stamp Act.

Application: How was Paul Revere an example of a Patriot?

Analysis: Make a timeline of the steps leading to the war.

Synthesis: If you were alive during the Revolutionary War, what would you have done?

Evaluation: Who do you think was the most important patriot and why?

Science Example (Life Cycles)

Recall: Identify the stages of a frog and a flower life cycle. Write the stages with a brief description that describes each one.

Comprehension: Identify two examples of animals that are classified as being in the following groups: insects, amphibians, mammals, and birds. Find a picture and include an explanation of one feature you might observe during the life cycle of each classified animal.

Application: Identify what the main environmental factors are that affect the life cycle of one plant and one animal of your choice. Think back to the previous prompt.

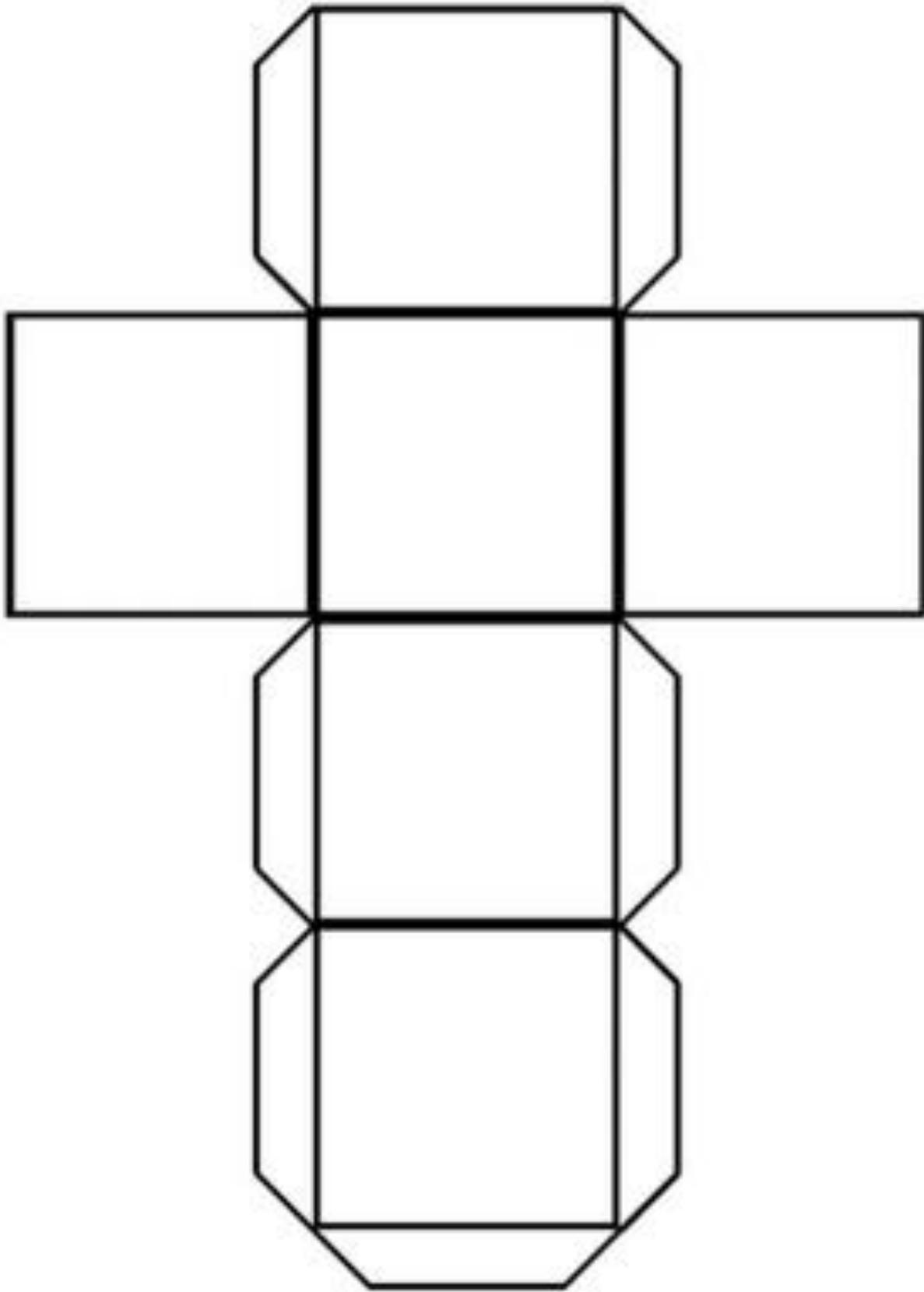
Analysis: Create an organizer that compares the difference and determines the similarities of how the main environmental factors affect the life cycle of one plant and one animal group of your choice. Your choices must be different from the previous level.

Synthesis: Compose a rhyme or song that includes the most important information regarding the life cycle of either a plant or an animal.

Evaluation: Choose three features of either one plant or animal that help it adapt in its environment to survive. Develop a set of criteria to judge which feature of your plant or animal is most important for help it adapt to survive and explain which feature was the most important and how it protects the life cycle.

Bloom's Taxonomy with Prompts

| Taxonomy Level | Explained | Prompts |
|----------------|--|--|
| Recall | Students recite content from memorization. | What was the dog's name? What is the formula for...? What was the date when...? What are all the steps in the process? |
| Comprehension | Students demonstrate understanding of a topic. | Can you explain how...? Why did ____? What is the difference between ____ and ____? Can you classify the information according to...? What is one example for each topic? |
| Application | Students use knowledge and skills in various situations. | Predict what would happen if... Explain how the author's use of ____ changed the story. Explain a solution to the problem. |
| Analysis | Students identify the components of a topic and analyze them in context. | Rank the arguments in order of importance. Which comment had the biggest impact? What is the relationship between ____ and ____? Can you defend the character's decision to ____? |
| Synthesis | Students bring together information about various topics to create something new. | Add a character to the chapter and explain how it would impact the novel. Create a graphic or cartoon that depicts... Design an improved process... |
| Evaluation | Students use all previous levels to judge the validity or success of something based on specific criteria. | Which essay is successful? Explain why. Which process is the most efficient? Why? Did the people meet their goal? Explain. Can you judge the value of... |



Camp Songs

Select and teach your students a camp song from your childhood or one that you sang during summer camp or camping with family.

Once your students have memorized the song, ask them to change the lyrics to reflect their new learning about a topic or concept. If your students need scaffolding to get started, it's okay to write a few verses together. If it's the first time using this strategy, you might want to compose a complete song about a previously learned topic to share with your students as an example.

The goal isn't the song students create as much as it is the students' conversations while they are creating the song. Before presenting to the whole class, ask groups to make sure everything is clear and concise.

Once all the songs are completed, the teacher can copy the songs for students to use as a review for upcoming assessments.

Campfire Song Suggestions

- "I've Been Working on the Railroad"
- "Puff, the Magic Dragon"
- "Home on the Range"
- "This Old Man"
- "On Top of Old Smokey"
- "This Land is Your Land"
- "Hokey Pokey"
- "B-I-N-G-O"

You can also use other types of songs, rap music or poetry for this summarization strategy as long as they have a decent rhyme and a beat!

Carousel Brainstorming

Post chart paper or poster boards around the room to display questions, quotes or concepts related to the topics or concepts being learned. Divide students into groups and give each group of students their own specific color of marker. Each group will stand in front of one of the posters posted on the wall.

Each group will add ideas to the poster in front of them about the topic or concept listed at the top. Students can include the following in their responses:

- attributes
- opinions
- comparisons

No matter what the teacher has written on the poster, it is a prompt for students to respond to in order to review information about the recent learning. As each group arrives at the next poster, the students need to take time to read what was contributed by previous groups before adding any information in order not to contribute repeated thoughts or comments.

It is very important to keep time and keep the pace fast in order to keep students on task and engaged. For younger students, just a few minutes is adequate and for older students, they might need up to 4-5 minutes depending on the topics.

As soon as time is up, each group will move to the next poster and begin. Continue until all groups have visited each poster. Then ask each group to summarize the information on one poster for the whole class.

Options

For older students, you can ask each student to record two bits of information from each poster and create a written summary using those two points from each poster.

Another option is to have groups of students to remain in one place and move the posters when time is up for each round.

Give One, Get One, Move On

This is a quick processing strategy that works as a “brain dump” to take lectures or learning experiences that are longer in substance or time and breaks them into manageable chunks so that students have time to process the information. This strategy can be used in all content areas, at any time, in any place. Students just need paper and a tool for writing.

Throughout your lesson, take breaks and allow students to process what has been presented. Students set up a piece of paper with 9 squares and fill in a few of the boxes with different skills, concepts, or facts they recall from the presentation. (You can also modify by using 6 or 12 squares.) Give students two to three minutes to write their ideas using the sentence starters that you have written on the board.

Once everybody has at least one or two ideas written down, have students choose the one that they feel is the most insightful. Tell them to read their sentence to themselves and to fix any mistakes.

Allow students to get up, walk around the class and share with their classmates by reading their sentences directly off of their notes. Here are some rules that students should follow:

- Students must keep on sharing until you tell them that the activity is finished.
- Students must jot down the name and ideas of their classmates.
- Students must follow a specific discussion structure and use sentence starters.

Option: Playing music while students are sharing.

When students are finished sharing and have filled their matrix, follow up with one of the following ideas:

- Ask students to write a coherent summary of the presentation using the information recorded from other students’ ideas.
- Nominate students to share the most meaningful idea they received.
- Have students put the facts, concepts or skills in a logical order and rewrite each idea into sentence form.

Share One, Get One

| | | |
|--|--|--|
| | | |
| | | |
| | | |

Have some of the following sentence starters posted in your room:

Expressing an Opinion:

- In my opinion...
- I believe...
- It seems to me that...
- Based on my experience...

Comparing Ideas:

- My idea is similar in that...
- I agree that...
- My idea builds on _____'s idea in that...

Disagreeing:

- Although _____ has a valid point, I disagree. I believe that...

Seeking Clarification:

- So what you are saying is...?
- In other words, you think that...?
- If I understand you correctly, you are saying that...?

Reporting:

- _____ pointed out that ...
- _____ stated that...
- _____ indicated that...
- _____ emphasized that...
- According to _____,

Charades

This game is an effective summarization experience and engaging for all students.

1. Divide the class into two teams.
2. Have the students within each team create small groups of three or four.
3. Hand out slips of paper naming skills, concepts, facts or people that you've been learning about.
4. Ask small groups to discuss what they know about the topic and determine how to act it out the words.
5. When everyone is ready, reassemble the two teams and have the small groups present their pantomimes to the other small group on their team.

Give points if the teams can guess what they're presenting.

You can choose to exclude typical clue motions used in the game charades such as "sounds like", "TV" or fingers against the forearm showing the number of syllables.

Alternatives

You could also focus on summarization of key concepts, topics and skills by playing Pictionary. Instead of acting out the elements, teams would draw the clues.

Relay Charades

1. Split the class in half.
2. Have each half form a line facing away from one another and sit down.
3. The first person in line taps the next and acts out a word. When the person thinks they have it, they clap twice. The actor sits and the new person acts out what they “thought” the word was to the next person.
4. The last person runs to the front and writes the word down.
5. If one team writes down the correct word, they get a point.

Exit Slips

Exit slips are written student responses to questions teachers pose at the end of a class or lesson. These quick, informal assessments enable teachers to quickly assess students' understanding of the material.

- They provide teachers with an informal measure of how well students have understood a topic or lesson.
- They help students reflect on what they have learned.
- They allow students to express what or how they are thinking about new information.
- They teach students to think critically and summarize information.

At the end of your lesson ask students to respond to a question or prompt.

Note: There are three categories of exit slips (Fisher & Frey, 2004):

- Prompts that document learning:
 - Example: Write one thing you learned today.
 - Example: Discuss how today's lesson could be used in the real world.
- Prompts that emphasize the process of learning:
 - Example: I didn't understand...
 - Example: Write one question you have about today's lesson.
- Prompts to evaluate the effectiveness of instruction:
 - Example: Did you enjoy working in small groups today?
- Other exit prompts include:
 - I would like to learn more about...
 - Please explain more about...
 - The thing that surprised me the most today was...
 - I wish...

Review the exit slips to determine how you may need to alter your instruction to better meet the needs of all your students.

5-3-1

(alone, pair, group)

How to Use

1. Alone

Pose a question or topic related to the lesson that has many possible response. Then have students individually brainstorm **five** possible answers or things they know about the topic.

2. Pair

Ask students to work in pairs to come up to share their lists and then decide on the **three** best answers or ideas from their two lists.

3. Group

Instruct the pair to join with another pair of students to choose the **one** response they think is best or most significant.

Use 5-3-1 at any point in the lesson to structure meaningful conversation and allow students an opportunity to summarize the information up to that point.

- Before introducing new material to tap into prior knowledge or learning
- After watching a video to gauge a reaction to the information shared
- After reading a short text to initiate a discussion
- When linking one lesson to an upcoming lesson
- After a science experience or experiential exercise to summarize findings/learning

Each group of four students shares their selection of the most important response with the whole group.

5-3-1

Question or Topic:

[INSERT QUESTION OR TOPIC HERE]

5 On your own, write five ideas you have about this question or topic:

1. _____

2. _____

3. _____

4. _____

5. _____

3 Pair with a partner. Which 3 ideas were the **BEST**? List them:

1. _____

2. _____

3. _____

1 Join another pair to create a group of four. Review everyone's ideas and determine which one is the most important answer. One of you will share this idea with the rest of the class. Write the **BEST** answer here, remembering that each member of the group must AGREE!

1. _____