Comprehension is an OUTCOME Informative Text



Anita L. Archer, PhD Author, Consultant, and Teacher

archerteach@aol.com

Archer, A., & Hughes, C. (2011). Explicit Instruction: Effective and Efficient

Teaching. NY: Guilford Publications.

www.explicitinstruction.org

Comprehension is an OUTCOME

The student:

- Reads the words accurately and fluently
- Understands the meaning of the words
- Has adequate background knowledge
- Focuses attention on critical content

Application of Research to Passage Reading

- Before passage reading
- During passage reading
- After passage reading

Application to Informative Text

BEFORE – Before Passage Reading

- Preteach the **pronunciation** of unfamiliar words before passage reading (as necessary).
- Explicitly teach critical vocabulary terms.
- Directly teach (or activate) critical background knowledge before passage reading.

Preteach the pronunciation of unfamiliar words before passage reading (as necessary).

Planning

- Are there unfamiliar words that students may not have heard, read, or decoded?
- If so, how should the words be addressed?
 - Incorporate the pronunciation into the vocabulary instruction.
 - Introduce the pronunciation as the passage is being read.
 - **Pre-teach** pronunciation of words before the passage is read.

Preteach the pronunciation of unfamiliar words before passage reading (as necessary), cont.

Planning

Word	Instruction
archaeology	with vocabulary
archaeologist	with vocabulary
excavate	with vocabulary
artifacts	with vocabulary

Preteach the pronunciation of unfamiliar words before passage reading (as necessary), continued

Leveled Text – Treks through Time (Wonders)

loop loop

descendant de scend ant

tradition tra di tion

expedition ex pe di tion

preserve pre serve

historical his tor i cal

document doc u ment

location lo ca tion

ancestors an ces tors

respectfully res pect fully

Explicitly teach critical vocabulary terms.

Planning

- Are there vocabulary words that are unknown and critical to comprehension?
- If so, how should the words be addressed?
 - The word is adequately taught in the passage.
 - Introduce the meaning of the vocabulary word as the passage is being read.
 - Pre-teach the vocabulary word before the passage is read.

Explicitly teach critical vocabulary terms.

Step 1: Introduce the word's pronunciation.

Step 2: Introduce the word's meaning.

Step 3: Illustrate the word with examples.

(and non-examples when helpful)

Step 4: Check students' understanding.

Explicitly teach critical vocabulary terms.

Step 1: Introduce the word's pronunciation.	descendant de scend ant
Step 2: Introduce the word's meaning.	A descendant is a person who is related to a certain ancestor.
Step 3: Illustrate the word with examples. (and non-examples)	 You have great-great grandparent who is not living. You are a descendant of that great-great grandparent. You have a relative that lived 200 years ago. You are a descendant of that relative.
Step 4: Check students' understanding.	descendant / not descendant - Are you a descendant of your great grandfather? - Are you a descendant of your neighbor?

Explicitly teach critical vocabulary terms, cont.

Step 1: Introduce the word's pronunciation.	preserve pre serve
Step 2: Introduce the word's meaning.	When you preserve something, you protect it so it will last.
Step 3: Illustrate the word with examples. (and non-examples)	 A museum will preserve a delicate piece of ancient pottery by putting it in a glass container. To preserve vegetables a little longer, we put them in the refrigerator.
Step 4: Check students' understanding.	Preserve/not preserve You pressed a flower and put it in an envelope. You throw away a flower.

Directly teach (or activate) critical background knowledge before passage reading, cont.

Planning

- Is there critical background knowledge necessary for comprehension?
- If so, how should background knowledge be addressed?
 - Utilize the graphics within the text to bolster background knowledge.
 - Directly teach critical background knowledge before passage reading.

Plan

Analyze the Cover.

Directly teach (or activate) critical background knowledge before passage reading.

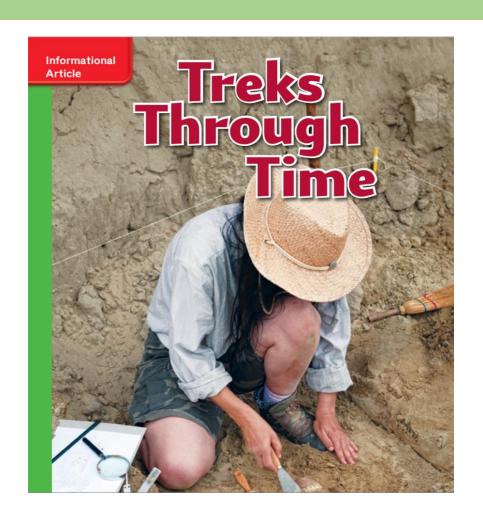
Word

archaeology

archaeologist

excavate

artifacts



DURING – During Passage Reading

- Provide repeated reading practice to build fluency and facilitate comprehension.
- Focus attention on critical content. READ STOP RESPOND
- Ask text-dependent questions as students are reading text.
- Teach research-validated strategies to enhance comprehension.
- Teach text structures and features, both narrative and informative.

Provide repeated reading practice to build fluency and facilitate comprehension.

- The teacher divides the passage into meaningful segments.
- First Read: Students read passage segment silently.
 - Students read silently or whisper read the segment.
 - If the student finishes the segment before the teacher regains attention, the student rereads the segment.
 - Teacher circulates and listens to individuals read.
- Second Read: Students reread segment orally using one of these options.
 - Teacher and students read segment chorally.
 - Teacher and students read segment using cloze reading.
 - Students read segment to their partners.
 - Teacher calls on individuals to read. Student says ME or WE. If the student says WE, classmates are invited to read together.

Informative Text 1

Teacher-Generated Questions

Ask text-dependent questions as students are reading text.

Text dependent questions

 Can only be answered with evidence from the text or content presented

YOU HAVE TO READ THE TEXT!

Ask **text-dependent questions** as students are reading text, cont.

- •Keeps reader **IN** the text **NOT OUT** of the text
- •Departing the text removes students' cognition from the text message, reducing concentration and comprehension

Canoes

A canoe is a long, narrow boat that does not have a motor or a sail. Several people can sit in most canoes. These people face the front of the boat, or the bow. They use paddles to move the canoe through the water and to make the canoe change directions.

Native Americans used canoes to travel down rivers. In the northern part of the United States, where birch trees grew, Native Americans made canoes from birch bark. In other parts of the country, Native Americans made dugout canoes from logs.

Dugout canoes were made from logs. First, the canoe makers would select a long, thick log. Next, the canoe makers would burn a hole in the middle of the log. This hole went only part way through the log. Next, the canoe makers scraped out the inside of the log to make it hollow.

Canoes made from birch bark were much lighter than dugout canoes. They were made from bark stripped from birch trees. After the canoe makers stripped the bark from the birch trees, they would sew these strips of bark together. Then, the bark was attached to a wooden frame to form the canoe.

Today, canoes are mainly used for fun and recreation. People often use canoes on hunting and fishing trips. Other people enjoy paddling on rivers or lakes in their canoes. Unlike the early canoes, most canoes are made by machine today. They are made from such things as wood, metal, and plastic

Canoes

A canoe is a long, narrow boat that does not have a motor or a sail. Several people can sit in most canoes. These people face the front of the boat, or the bow. They use paddles to move the canoe through the water and to make the canoe change directions.

1. Describe a canoe.

Underline details to include in your answer.

Begin by saying or writing:

A canoe is ______.

Canoes

A canoe is a long, narrow boat that does not have a motor or a sail. Several people can sit in most canoes. These people face the front of the boat, or the bow. They use paddles to move the canoe through the water and to make the canoe change directions.

1. Describe a canoe.

Begin by saying or writing: A canoe is .

A canoe is a long, narrow boat that moves through water when people paddle.

Native Americans used canoes to travel down rivers. In the northern part of the United States, where birch trees grew, Native Americans made canoes from birch bark. In other parts of the country, Native Americans made dugout canoes from logs.

2. What were Native American canoes made from?

Underline details to include in your answer.

Begin by saying or writing.

Native American canoes were made from .

Native Americans used canoes to travel down rivers. In the northern part of the United States, where birch trees grew, Native Americans made canoes from <u>birch bark</u>. In other parts of the country, Native Americans made dugout canoes from <u>logs</u>.

2. What were Native American canoes made from?

Begin by saying or writing:

Native American canoes were made from ...

Native American canoes were made from birch bark and logs.

Dugout canoes were made from logs. First, the canoe makers would select a long, thick log. Next, the canoe makers would burn a hole in the middle of the log. This hole went only part way through the log. Next, the canoe makers scraped out the inside of the log to make it hollow.

3. Retell the steps followed in making a dugout canoe.

Dugout canoes were made from logs. 1) First, the canoe makers would select a long, thick log.

- 2) **Next**, the canoe makers would burn a hole in the middle of the log. This hole went only part way through the log.
- 3) **Next**, the canoe makers scraped out the inside of the log to make it hollow.

3. Retell the steps followed in making a dugout canoe.

Canoes made from birch bark were much lighter than dugout canoes. They were made from bark stripped from birch trees. After the canoe makers stripped the bark from the birch trees, they would sew these strips of bark together. Then, the bark was attached to a wooden frame to form the canoe.

4. Retell the steps followed in making a canoe from birch bark.

Canoes made from birch bark were much lighter than dugout canoes. 1) They were made from bark stripped from birch trees.

- 2) After the canoe makers stripped the bark from the birch trees, they would sew these strips of bark together.
- **3) Then**, the bark was attached to a wooden frame to form the canoe.

4. Retell the steps followed in making a canoe from birch bark.

Today, canoes are mainly used for fun and recreation. People often use canoes on hunting and fishing trips. Other people enjoy paddling on rivers or lakes in their canoes. Unlike the early canoes, most canoes are made by machine today. They are made from such things as wood, metal, and plastic.

Scaffolding Questions #5

- How did Native Americans use their canoes?
- How do people today use canoes?
- What materials did Native
 Americans use to make canoes?
- What materials are used today to make canoes?

5. How are canoes today different from Native American canoes?

Informative Text 2

Student-Generated Questions

Comprehension Strategies

Comprehension Strategy – **Student Generated Questions**

Students formulate questions (e.g., who, what, when, where, why, how) on passage content.

I do it. (demonstration) Students generate questions

Who

What

• Thomas Alva Edison lit up the world with his invention of the electric light. Without him, the world might still be a dark place. However, the electric light was not his only invention. He also invented the phonograph, the motion picture camera, and over 1,200 other things. About every two weeks Edison created something new.

We do it. (guided practice) Students generate questions

Who

What

Thomas A. Edison was born in Milan, Ohio, on February 11, 1847. His family moved to Port Huron, Michigan, when he was seven years old. Surprisingly, he attended school for only two months. His mother, a former teacher, taught him a few things, but Edison was mostly self-educated. His natural curiosity led him to start experimenting at a young age with electrical and mechanical items at home.

You do it. **Students generate questions**

Who

What

When he was 12 years old, he got his first job. He became a newsboy on a train that ran between Port Huron and Detroit. He set up a laboratory in a baggage car of the train so that he could continue his experiments in his spare time. Unfortunately, Edison's first job did not end well. He was fired when he accidentally set fire to the floor of the baggage car.

Comprehension Strategy – Student Generated Written Questions/Answers

Students generate written study questions and answers after reading a passage segment.

- 1. Read a paragraph or related paragraphs
- 2. Generate one or two questions
- 3. Record the questions
- 4. Record the answers

Comprehension Strategy – Student Generated Written Questions/Answers, cont.

Question

What does a canoe look like?

Answer

A canoe is a long, narrow boat that is paddled.

Comprehension Strategy – Student Generated Written Questions/Answers, cont. 2

Question

What were Native American canoes made from?

Answer

Native American canoes were made from logs or from birch bark.

Comprehension Strategy – Student Generated Written Questions/Answers, cont. 3

Question

How were dugout canoes made?

Answer

First, a long, thick log was selected.

Then a hole was burned in the log.

Next, the log was scraped out until it is hollow.

Success Criteria

- 1. Each question focuses on critical content.
- 2. Each question:
 - begins with a capital letter
 - ends with a question mark
 - has correct spelling
 - makes sense

Success Criteria, cont.

- 1. Each answer is accurate and complete.
- 2. Each answer:
 - incorporates words from the question
 - uses complete sentences
 - makes sense
 - begins with a capital letter
 - ends with a period
 - has correct spelling
 - has legible handwriting

Teach HOW TO STUDY

Read Cover Recite Check

Read Cover Recite Check

Read Cover Recite Check

Informative Text 3

Comprehension Strategies

Paragraph Shrinking

Comprehension Strategies

Comprehension Strategy – Paragraph Shrinking

Students formulate main idea statements to summary information.

Comprehension Strategy

Paragraph Shrinking

- Name the who or what.
 (The main person, animal, or thing.)
- 2. Tell the most important thing about the who or what.
- 3. Say the main idea in 10 words or less.

(Optional: Record your main idea sentence.)

(From the PALS program by Fuchs, Mathes, and Fuchs)

I do it.

Model (I do it.) "My Turn."

Show

- Proceed step-by-step.
- Exaggerate the steps.

Tell

- Tell students what you are doing.
- Tell students what you are thinking.

Gain Responses

- What they already know.
- Repeating what you tell them.

I do it example

The Coldest Continent

Antarctica is not like any other continent. It is as far <u>south</u> as you can go on earth. The South Pole is found there. <u>Ice covers the whole land</u>. In some places the ice is almost three miles thick. Beneath the ice are mountains and valleys.

We do it.

- Prompt (We do it.) "Let's _____ together."
- Prompt verbally.
 - Guide or lead students through the strategy.
 - Step do Step do Step do
 - Gradually fade your prompt.

We do it example

The climate in Antarctica is <u>harsh</u>. It is the <u>cold</u>est place on Earth. The temperature does not get above freezing. It is the <u>windiest</u> places in the world.

You do it.

Check for understanding. (You do it.)

- Verify students' understanding before independent work is given.
- Carefully monitor students' responses.
- Continue until students are consistently accurate.

Strategy – You do it.

Not many living things are found in Antarctica. People go there to study for only a short time. Very few animals can live there. Yet many animals live on nearby islands. Seals and penguins swim in the ocean waters. They build nests on the land. Some birds spend their summers in Antarctica. But most of the continent is just ice, snow, and cold air.

Informative Text 4

Text Structure

Informative Text Structures

Variety of Patterns

- Topic Details
- Explanation
- Sequence
- Compare and contrast
- Cause and effect
- Problem Solution

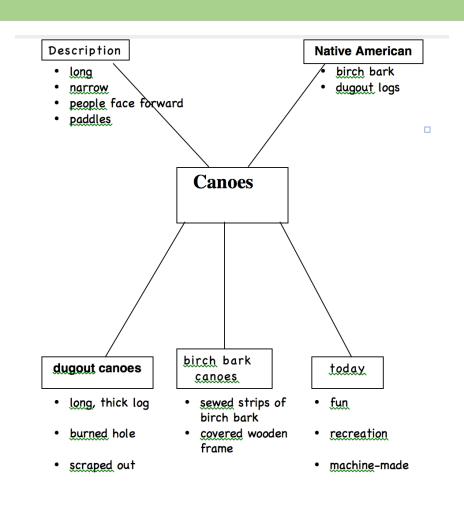
Informative Text Pattern – Topic and Details Questions

Organizing Questions

Who or what is the paragraph about?

What important thing or things did the author tell us about the who or what?

Informative Text Pattern – Topic and Details Example



Summary - Informational Text Topic and Details

This section of the chapter was about ...

First, the authors pointed out that...

This was important because...

Next, the authors mentioned that...

Furthermore, they indicated...

This was critical because...

Finally, the authors suggested that...

Summary - Informational Text

Topic: Native American Canoes

This passage was about *Native American Canoes*. First, the authors pointed out that canoes are long, narrow boats. This was important because Native American's used canoes as a means of transportation down rivers. Next, the authors mentioned that most of the Native American canoes were made from logs that were hollowed out. Furthermore, they indicated that in the northern part of the United States, canoes were made from bark stripped from birch trees and then sewn together. This was critical bécausé these canoes were much lighter than the dugout canoes. Finally, the authors suggested that today's canoes are different from early Native American canoes for a number of reasons: they are built by machines, they are not made of birch bark or dugout logs, and they are used for primarily for recreation rather than river transportation.

Summary - Informational Text

Chapter: *Decomposers*

In this section of the chapter, a number of critical points were made about decomposers. First, the authors stated that decomposers break down organisms that are no longer living such as dead plants, dead animals, and rotting wood. This is important because decomposers break the organisms into nutrients that can be used by plants. Next, the authors mentioned that earthworms are decomposers that eat plant life that has died. Furthermore, they indicated that earthworms pass nutrients from dead plants to the soil. This was critical because these nutrients enrich the soil and thus support plant growth. Finally, the authors suggested that fungi and some insects are other examples of decomposers.

Explanation

There are a number of reasons why

The most important reason is...

Another reason is ...

A further reason is ...

So you can see why...

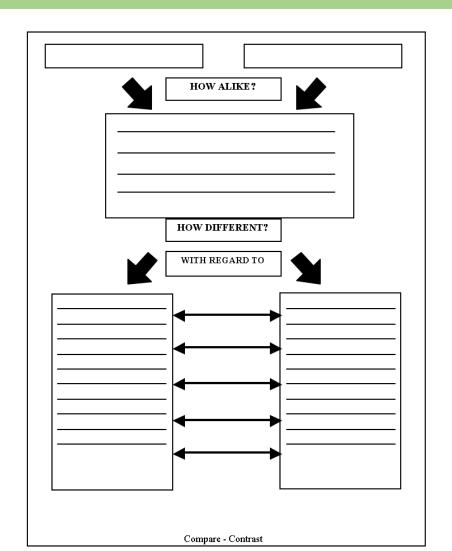
Explanation - Why

There are a number of reasons why non-native plants and animals damage the Great Lakes. The most important reason is that many invasive species take food from native species. Another reason is that some of the invasive, non-native species attach to docks and to boats, causing great damage. A further reason is that some non-native species clog water pipes, restricting the movement of water to industries and residences. So you can see why actions need to be taken to protect the Great Lakes from invasive, non-native plants and animals.

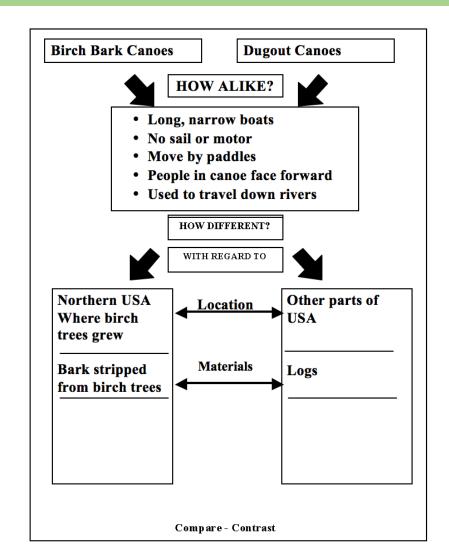
Informative Text Pattern – Compare and Contrast

Organizing Questions		
How are similar?	and	the same or
How are	and	different?

Informative Text Structure Compare and Contrast Example



Informative Text Structure Compare and Contrast



Compare and Contrast

Although...and...are different, they are alike in some interesting ways.

For example, they both...

They are also similar in ...

Another similarity ...

Finally they both...

Compare and Contrast

Although Native American canoes and modern canoes are different, they are alike in some interesting ways. For example, they both are vehicles used to travel on rivers or lakes. They are also similar in their shape. Both are long, narrow boats. Another similarity is that paddling is used to move both types of canoes. Finally they both can be used for travel, movement of objects, and recreation.

Compare and Contrast, cont.

```
... and ... are the same in several ways .
```

First of all, ... and ... are both

Likewise, they are

In the same way, they are

Therefore, ... and ... have much in common.

```
... and ... are different in several ways.
```

First of all, ... is/arewhile ... is/are ...

Moreover, ... are/is ... while ... is/are ...

Another way that they are differ is ...

Compare and Contrast - Example

Narrative and informative written products are similar in a number of ways. First, they both have an author intent on sharing his/her ideas. Another critical similarity is the goal of informative and narrative writing: to communicate to a reader or group of readers. An equally important similarity is that both genre' utilize the words, mechanics, and grammar of the author's language. Finally, both are read on a daily basis across the world.

The differences between narrative and informative written products are also obvious. The most important difference is their purpose. Narratives convey a story, real or imagined, while informative products transmit information that the reader needs or is interested in learning. In addition, they are structured differently. The structure of a narrative is based on the elements of a story: settings, characters, the character's problems, attempts at resolving the problem, and finally its resolution. In contrast, when writing an informative product, authors organize the information into paragraphs each containing a topic and critical details. In the final analysis, narratives differ from informative text in two major ways: content and structure.

Informative Text Pattern – Sequence

Organizing Questions

What happened first?

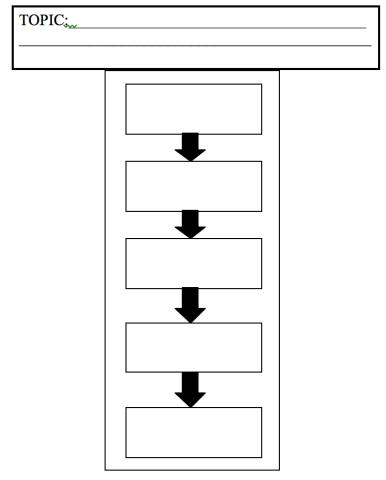
What happened next?

What happened next?

What happened next?

What happened in the end?

Informative Text Pattern – Sequence Example



Sequence - Flow Chart

Informative Text Pattern – Sequence

TOPIC:

How dugout canoes are made 1. A long, thick log is selected. 2. A hole is burned in the middle of the log. 3. The inside of the log is scraped out. 4. The scraping continues until the log is hollow. 5. A dugout canoe is made.

Sequence - Flow Chart

Informative Text Pattern – Sequence, ex.

Title:	
When	_, the first thing that happens is
The second thing that occurs is	····
Next,	
After that	
Finally,	
In the end,	

Informative Text Pattern – Problem and Solution

Organizing Questions

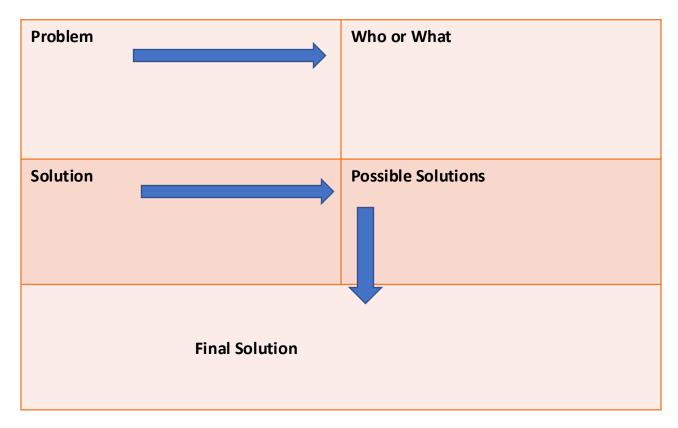
What is the problem?

Why is it a problem?

What is being done?

Does it work?

Informative Text Pattern – Problem and Solution Example



Hennessy, 2021

Informative Text Cause and Effect

Organizing Questions

What happened?

Why did it happen?

What caused it to happen?

What is affected?

Cause	Effect

AFTER – After Passage Reading 1

• Have students engage in discussions of the passage.

Have students write in response to passages.

Discussions

Hattie Effect Size .82

How to optimize participation in discussions

1. Provide a **well-designed question** or prompt to direct the discussion.

2. Have students **plan** their responses to the prompt before the discussion. Have students **record** (write down) their **talking points.**

Discussions

- 3. Have students share their ideas with their **partners** before the discussion.
- 4. Scaffold the discussion with sentence starters.
- 5. Establish rules of conduct for a discussion.
- In a large class, have the students discuss the prompt with their team or a huddle group of 6 to 8 members.

AFTER – After Passage Reading 2

• Have students engage in discussions of the passage.

Have students write in response to passages.

Have students write summaries of what they have read. Writing Strategy

Write down the topic of the summary.

List - Make a list of important details.

Cross-out - Cross out any unnecessary or weak details.

Connect - Connect ideas that could go together in one sentence.

Number - Number the details in the order that they will appear in the paragraph.

Have students write summaries of what they have read. List your ideas.

Penguin's birth

- Male takes care of egg
- Female lays egg
- Female leaves
- Female spends winter at sea
- Male puts egg on his feet under belly
- Male stays on egg for two months
- Male doesn't eat
- Egg hatches
- Male must care for baby

Have students write summaries of what they have read. Cross-out, Connect, Number

Penguin's birth

- 3 Male takes care of egg
- 1 Female lays egg
- Female leavesFemale spends winter at sea
- Male puts egg on his feet under bellyMale stays on egg for two months
- 5 Male doesn't eat
- 6 → Egg hatches
 Male must care for baby

Have students write summaries of what they have read. Writing Strategy Example

The birth of penguins is fascinating. The female penguin lays an egg. However, the female penguin leaves soon after laying the egg and spends the winter in the sea. Meanwhile, the male must take care of the egg. For two months, he places the egg on his feet under his belly. During this time, the male penguin doesn't eat. Even after the baby penguin hatches, the male penguin must still care for the baby.

Have students write in response to passages. Sentence Expansion

Start Sentence: They made canoes.

Who: Native Americans

Where: across the North America

How: from hollowed out logs or birch bark stripped from birch trees

Expanded Sentence: Native Americans across North America made canoes from hollowed out logs or birch bark that was stripped from birch trees.

Have students write in response to passages. Because But So Writing Revolution Judith Hochman & Natalie Wexler. 2018

Early Native Americans made canoes because ...

Early Native Americans made canoes, but ...

Early Native Americans made canoes, so ...

Comprehension is an OUTCOME – Not a Strategy

The student:

- Reads the words accurately and fluently
- Understands the meaning of the words
- Has adequate background knowledge
- Focuses attention on critical content

BEFORE – Before Passage Reading Review

• Preteach the **pronunciation** of unfamiliar words before passage reading (as necessary).

Explicitly teach critical vocabulary terms.

 Directly teach (or activate) critical background knowledge before passage reading.

During – During Passage Reading Review

- Provide repeated reading practice to build fluency and facilitate comprehension.
- Focus attention on critical content. READ STOP RESPOND
- Teach research-validated **strategies** to enhance comprehension.
- Ask text-dependent questions as students are reading text.
- Teach **text structures and features**, both narrative and informative.
- Teach and guide students in using word learning strategies.

AFTER – After Passage Reading Review

• Have students engage in discussions of the passage.

Have students write in response to passages.

Thank you

How well we teach = How well they learn

Teach with Passion

Manage with Compassion

Recommended Book List - Reading Comprehension

Anita L. Archer, PhD Author, Consultant, and Teacher

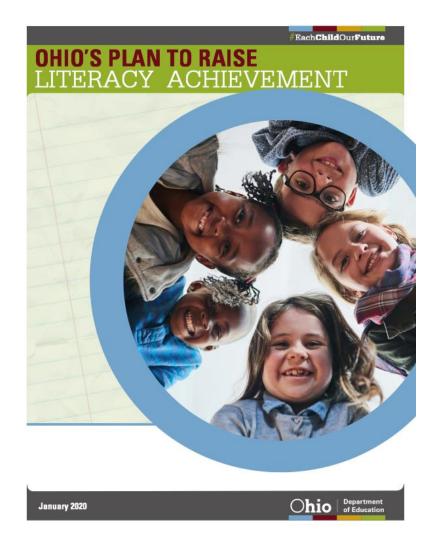
archerteach@aol.com

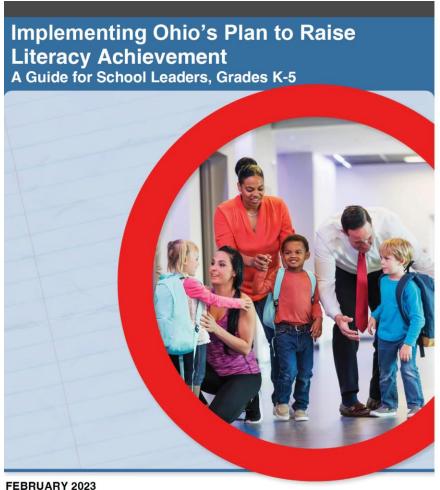
Archer, A., & Hughes, C. (2011). Explicit Instruction: Effective and Efficient

Teaching. NY: Guilford Publications.

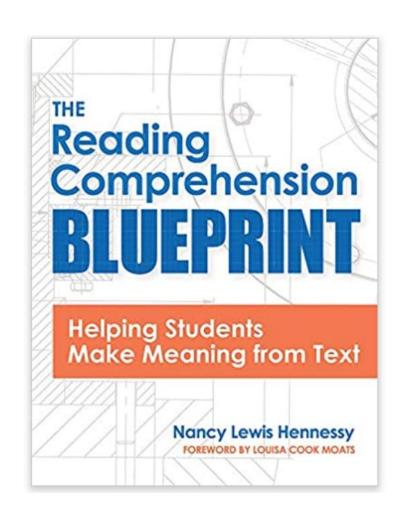
www.explicitinstruction.org

Recommended Reading





The Reading Comprehension Blueprint: Helping Students Make Meaning from Text Nancy Lewis Hennessy (2020)

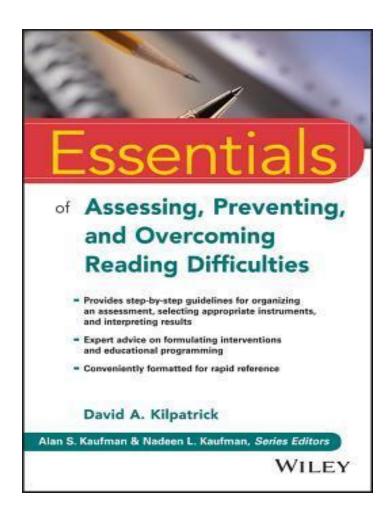


Letres Volume 1 and 2 Louisa C. Moats Carol A. Tolman



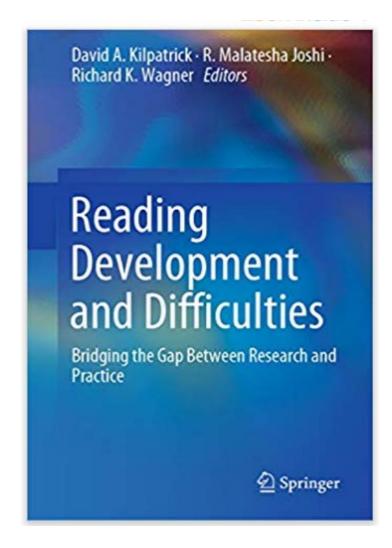
Essentials of Assessing, Preventing, and Overcoming Reading Difficulties

David A. Kirkpatrick

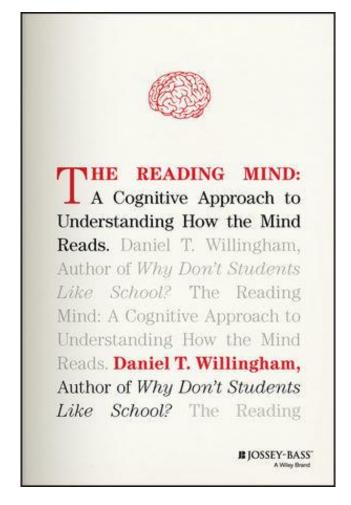


Reading Development and Difficulties: Bridging the Gap Between Research and Practice

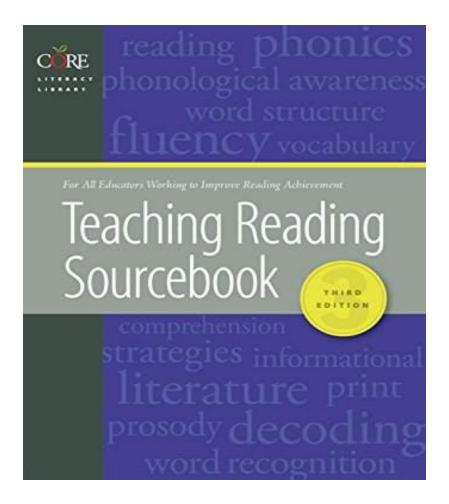
Editors: David A. Kirkpatrick, R. Malatesha Joshi and Richard K. Wagner



The Reading Mind A Cognitive Approach to Understanding How the Mind Reads Daniel T. Willingham

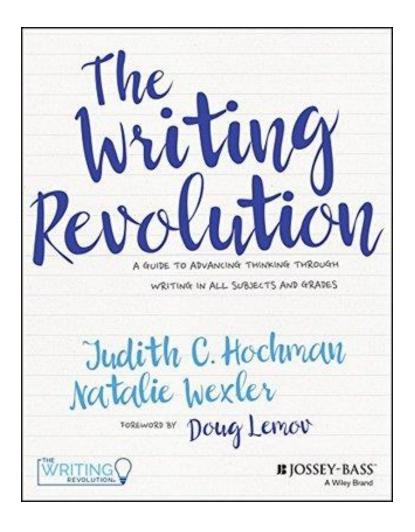


Teaching Reading Sourcebook CORE



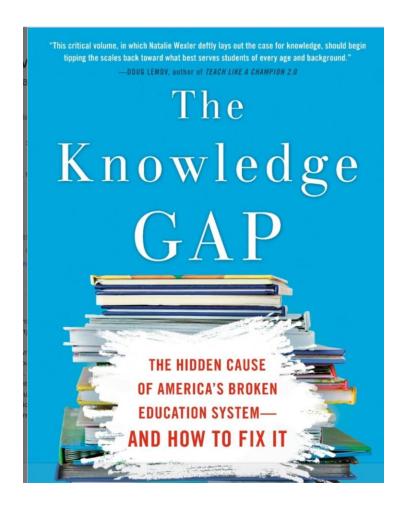
The Writing Revolution

Judith C. Hochman Natalie Wexler



The Knowledge Gap

Natalie Wexler 2019



Bringing Words to Life: Robust Vocabulary Instruction

Second Edition Isabel L. Beck, Margaret G. McKeown, Linda Kucan

