

INTERVENING WITH OLDER STUDENTS

An Example

*Before, During, After
Reading, Listening, Viewing*



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Big Idea

Every day in every class, students will:

Read

and **Write**

and **Speak.**

Every day in every class, students will:

Read

and **Write**

and **Speak.**

BEFORE

READING, LISTENING, VIEWING

Before Reading Strategies - Preview

- Teach the pronunciation and meaning of critical, unknown **vocabulary** words.
- Teach or activate any necessary **background knowledge**.
- Guide students in **previewing** the article/chapter.
- Establish a clear **purpose** for reading.

FRONTLOAD - VOCABULARY

Explicit Instruction of Vocabulary - Why

Vocabulary is related to reading comprehension.

“Indeed, one of the **most enduring findings** in reading research is the extent to which students’ vocabulary knowledge relates to their reading comprehension.”

(Osborn & Hiebert, 2004)

Explicit Instruction of Vocabulary - Why

- “**direct vocabulary instruction** has an impressive track record of improving students’ background knowledge and comprehension of academic content.” Marzano, 2001, p. 69
- .97 effect size for direct teaching of vocabulary related to content (Stahl & Fairbanks, 1986)
- Hattie Effect Size for Vocabulary Programs 0.67

Long Term Vocabulary Goal

By the end of high school, college-ready students will need to acquire about 80,000 words.

(Hirsh, 2003)

Vocabulary Instruction - Essentials

Vocabulary instruction that improves reading comprehension has:

1. **multiple exposures** to the word
2. both **definitional** and **contextual information**
3. **active participation** and **deep processing.**

Mezynski, 1983

McKeioman et al., 1985

Stahl & Fairbanks, 1986

Vocabulary Instructional Routine

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.

Explicit Instruction of Vocabulary

Step 1. Introduce the word's pronunciation.

- a) Show the word on the screen.
- b) Read the word and have the students repeat the word.

If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times or say the parts of the word as they tap.

Introduce the word with me.

This word is **complication**. What word? *complication*

Tap and say the parts of the word. *com pli ca tion*

Read the word by parts. (loop under the parts of the word) *complication*

What word? *complication*

Complication is a noun.

Explicit Instruction of Vocabulary

Step 2: Introduce the word's meaning.

Tell students the explanation. OR Have them read the explanation with you.

A **complication** is something that makes a situation harder to deal with or more difficult to do.

Step 3: Illustrate the word with examples.

Construction of Panama Canal 1881 – 1914

complications

- hot temperatures
- jungle environment
- mosquitos
- disease
- deaths
- engineering challenges
- and many MORE

Step 3: Illustrate the word with examples.

Situation	Complication
You are preparing to study.	You left your book at school. That is a ...
You are going to wash the family's clothes.	The washing machine is broken. That is a ...
You are going to a friend's birthday party.	You don't know the friend's address and you don't have a present. Those are ...
You are fixing spaghetti for a family dinner.	There is no pasta in the cupboard. That is a ...

Step 4: Check students' understanding.

Everyday complications

Situation	Complication
You are hoping to run a marathon.	One complication is ...
You have to walk one mile to school.	One complication is ...
You are babysitting two children, ages 3 and 5.	One complication is ...
You are planning a trip to Florida in the winter.	Some complications include ...

Frontload – Background Knowledge

Background Knowledge - Why

- Background knowledge of text has a major impact on whether or not a reader can comprehend text.

Anderson & Pearson, 1984; Bransford, Stein, & Shelton, 1984; Wilson & Anderson, 1986

- Across grades and reading ability, prior knowledge of subject area and key vocabulary results in higher scores on reading comprehension measures.

Langer, 1984; Long, Winograd, & Bridget, 1989; Stevens, 1980

Background Knowledge - Why

The more students know, the broader range of texts they can comprehend.

Willingham, 2015

A HIGHWAY OF WATER

Panama Canal

Location of the Country of Panama



Canal

A **canal** is a human-made waterway that provides passage between two natural bodies of water

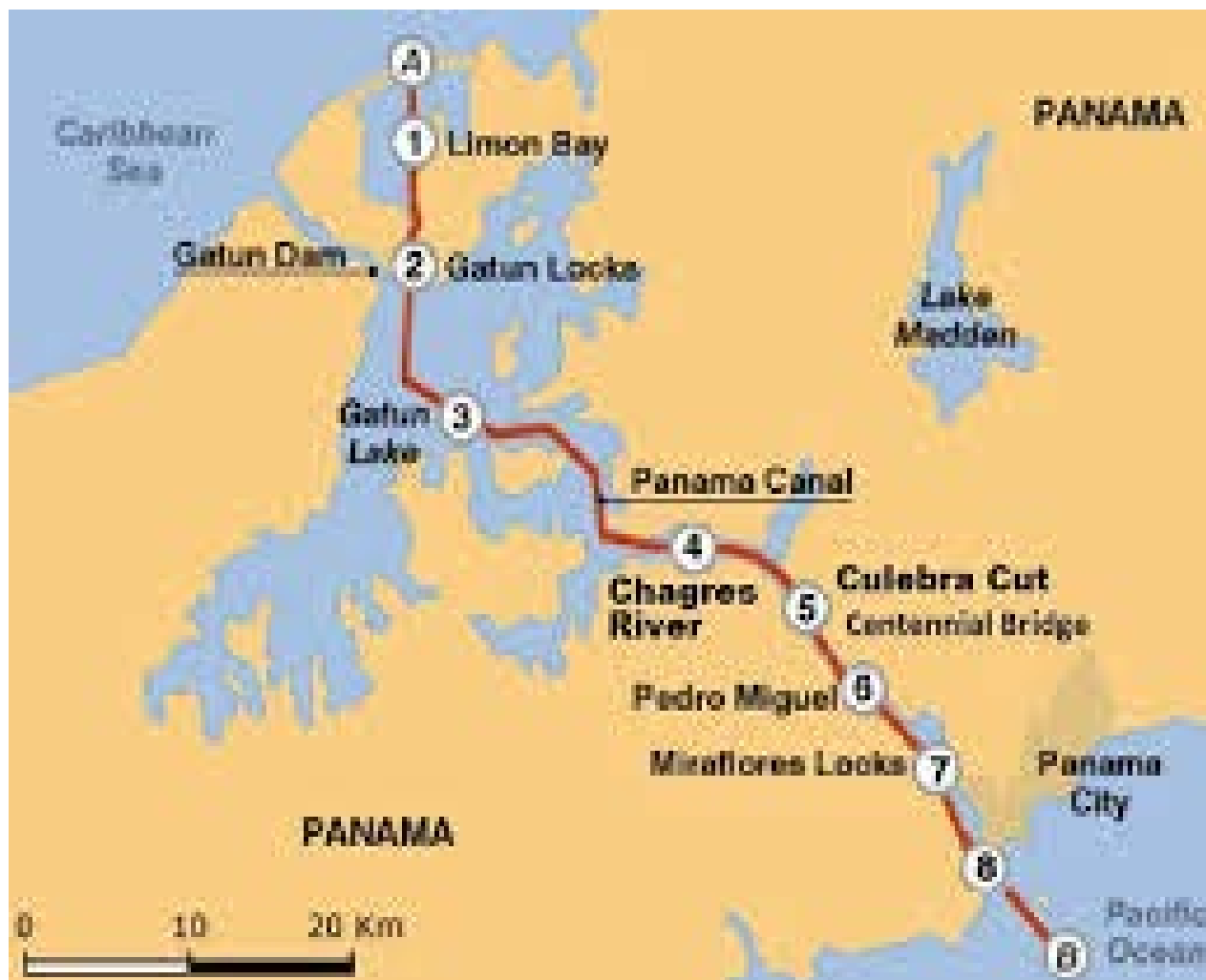


Panama Canal

The **Panama Canal** is a human-made waterway that provides passage between two natural bodies of water, the Atlantic Ocean and the Pacific Ocean.



Map – Panama Canal



Gatun Lake

Gatun Lake is an artificial lake that forms a major part of the Panama Canal.

Gatun Lake is 85 feet above sea level.



locks



Lock

- a device
- used for raising and lowering boats and ships
- between different water levels on river and canal waterways

locks



Ships traveling through Panama Canal



Ships traveling through Panama Canal



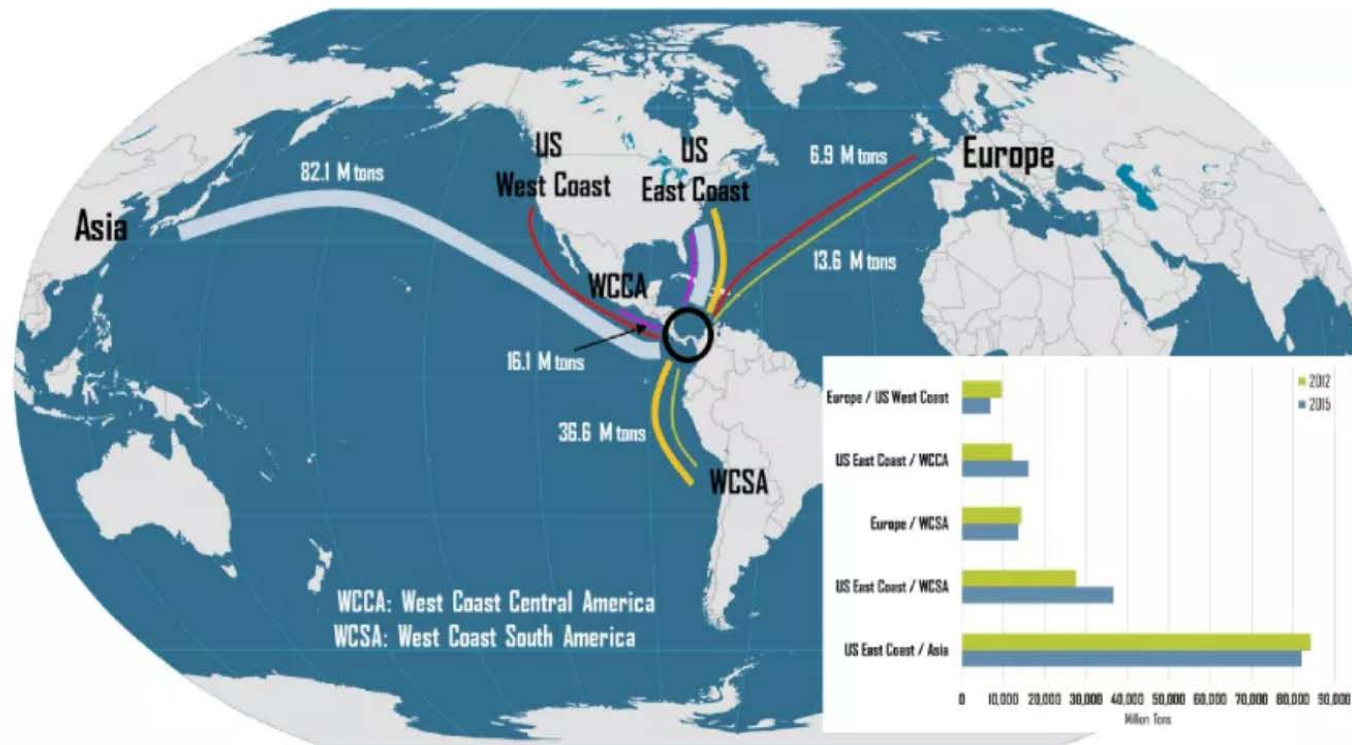
Ships traveling through Panama Canal



Important Trade Route Today

Main Trade Routes Using the Panama Canal, 2015

7



Main Trade Routes Using the Panama Canal, 2015

Fun Facts – Panama Canal

Number of Vessels

1914	--	1,000 vessels
2014	--	14,000 vessels

Time to Cross Panama Canal

8 to 10 hours

Toll (Cost to use Panama Canal)

Average toll = \$150,000

Fun Fact – Panama Canal

The Panama Canal has been designated as one of the **Seven Wonders** of the Modern World.

PREVIEW THE TEXT

Preview the Informative Text - Why

As the student previews, he/she discovers:

- the topics to be **covered**,
- the information that will be **emphasized**,
- how the material is **organized**.
- In addition, background knowledge is **activated**.

Preview:

A Highway of Water - Panama Canal

A Highway of Water

The Solution

The First Attempt to Build the Panama Canal

The United States Decides to Finish the Canal

Using the Panama Canal

ESTABLISH PURPOSE FOR READING

Learning Intentions

Students will be able to:

- Explain why the Panama Canal was built.
- Summarize the sequence of attempts to build the Panama Canal from 1881 to 1914.
- Describe the complications in constructing the Panama Canal.
- Explain the importance of the Panama Canal today.

Success Criteria

I will write three paragraphs about the Panama Canal using the following topic sentences:

- 1) The Panama Canal was built for the following reasons.
- 2) From 1881 to 1914, there were numerous attempts to build a canal connecting the Atlantic and Pacific Oceans in Central America.
- 3) Even though it is more than 100 years after the construction of the Panama Canal, it remains important today.

DURING

READING, LISTENING, VIEWING

Purpose of During Reading Strategies

- Focus on critical content
- Increase attention and concentration

Executive function is required for comprehending oral and written language.

Cain & Bigrell, 2014

During Reading - Preview

- **Read Stop Respond**
 - **Respond – Questions**
 - Teacher generated text dependent questions
 - Student generated questions
 - **Respond – Strategies - Informative**
 - Verbally retell topic and key details
 - Generate main idea statements
 - Take two column notes on content

Read Stop Respond

Teacher-generated, text-dependent questions

During Passage Reading - Ask Questions

Asking questions. A evidence-based, time honored procedure

The teacher asks questions to guide and monitor students' comprehension.

(Ambruster, Lehr, & Osborn, 2001; National Reading Panel, 2000; McKeown, Beck, & Blake, 2009))

Focus on Text-Dependent Questions

Text dependent questions

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

YOU HAVE TO READ THE TEXT!

Text-Dependent Questions **WHY**

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

Text-Dependent Questions – Informative Text

Highway of Water

Paragraph #1

Before the Panama Canal was built, how did people travel from the East Coast to the West Coast of the United States?

Begin by saying: Before the Panama Canal was built, people traveled from the East Coast to the West Coast of the United States using one of these three routes. One route was... Another route was ... The third route was...

Text-Dependent Questions – Informative Text

Highway of Water

Paragraph #1

What were some of the **complications** resulting from taking these routes?

Begin by saying: Some of the complications of these routes were ...

Text-Dependent Questions – Informative Text

Paragraph #2

Why did the authors describe a canal as a highway made of water?

Begin by saying: The authors described a canal as a highway made of water because ...

Text-Dependent Questions – Informative Text

Highway of Water

Paragraph #3

When planning for a canal from the Pacific Ocean to the Atlantic Ocean, what country was initially selected?

Was this plan carried out?

Read Stop Respond

Student-generated questions

Comprehension - Informational Text

Students Generate Questions (after reading)

Students generate study questions 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

Students Generate Questions (after reading) Paragraphs #5

Question

Why did France select Ferdinand de Lesseps to lead the building of the Panama Canal?

Answer

France selected Ferdinand de Lesseps to lead the building of the Panama Canal because he had already lead the building of the Suez Canal.

Students Generate Questions (after reading) Paragraphs #6

Question

What complications made France abandon the project?

Answer

France abandoned the building of the Panama Canal for many reasons including: hot temperatures, numerous diseases, the deaths of many workers, and no money to complete the project.

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

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

Strategies – Informational Text

Generate Main Idea Statements

Getting the Gist

- 1. Name the who or what the paragraph is about in a brief phrase.**
- 2. Identify two or three important details about the topic.**
- 3. “Shrink” the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)**

(From Vaughn, et. al. Collaborative Strategic Reading)

Model – I do it.

Getting the Gist

1. **Name the who or what the paragraph is about in a brief phrase.**
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(From Vaughn, et. al. Collaborative Strategic Reading)

(#5) In 1879, France began to build a canal across Panama. This project was led by Ferdinand de Lesseps. He was the builder of the Suez Canal in Egypt. He was experienced, and the French government felt that he could get the job done.

Model – I do it

Getting the Gist

1. Name the who or what the paragraph is about in a brief phrase.

Building of Panama Canal

2. Identify two or three important details about the topic.

*France - 1879
Experienced builder*

3. “Shrink” the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

(#5) In 1879, France began to build a canal across Panama. This project was led by Ferdinand de Lesseps. He was the builder of the Suez Canal in Egypt. He was experienced, and the French government felt that he could get the job done.

In 1879, France began building the Panama Canal led by an experienced canal builder.

We do it

Getting the Gist

1. **Name the who or what the paragraph is about in a brief phrase.**
2. **Identify two or three important details about the topic.**
3. **“Shrink” the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)**

(From Vaughn, et. al. Collaborative Strategic Reading)

(#6) Unfortunately, problems began as soon as construction started. It rained every day, causing the soil to become heavy and sloppy. Temperatures climbed as high as 130 degrees. Tropical diseases such as yellow fever and malaria caused illness or death to the majority of workers. These complications put a great deal of stress on the project. The money allotted to build the canal quickly ran out. In 1899, France abandoned the project.

We do it

Getting the Gist

1. Name the who or what the paragraph is about in a brief phrase.

Complications in building canal

2. Identify two or three important details about the topic.

**Hot temperatures
Tropical diseases
Not enough money**

3. “Shrink” the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

#6) Unfortunately, problems began as soon as construction started. It rained every day, causing the soil to become heavy and sloppy. Temperatures climbed as high as 130 degrees. Tropical diseases such as yellow fever and malaria caused illness or death to the majority of workers. These complications put a great deal of stress on the project. The money allotted to build the canal quickly ran out. In 1899, France abandoned the project.

Complications including hot temperatures, diseases, and inadequate funds forced the French to stop the project.

You do it

Getting the Gist

1. **Name the who or what the paragraph is about in a brief phrase.**
2. **Identify two or three important details about the topic.**
3. **“Shrink” the paragraph by stating or writing the main idea.** (Say it in 10 to 15 words)

(From Vaughn, et. al. Collaborative Strategic Reading)

(#7) The U.S. Congress decided to finish the canal. The U.S. government paid \$40 million to France for the completed work and abandoned equipment. In 1903, after some negotiating, a treaty between the United States and Panama was signed paying Panama \$10 million for a 10-mile-wide strip of land for the canal. This treaty also guaranteed \$250,000 to Panama each year for use of its land and ensured its independence. This deal was viewed as a major foreign policy achievement at the time.

U.S. decided to finish the canal after paying France and Panama for land and work.

Read Stop Respond

Respond – Strategies – Informative

Two column notes

Comprehension - Informational Text

Comprehension Strategies

Two Column Notes

USA – Canal	- Pays France for work
	- Pays Panama for land
Avoided problems	- built hospitals - built water & sewage systems
	- fought mosquitoes
locks	- moved ships from level to level
	When the US decided to build the Panama Canal, the US made conditions better for the workers who built the locks.

AFTER READING

After Reading - Preview

- **Discuss** content in response to well-designed question/task
- **Summarize Passage Content – Written**
 - Sentence Summary
 - Paragraph Summary – Strategy
 - Paragraph Summary – Writing Frame

AFTER READING

Discussion

Discussions

How to optimize participation in discussions

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

Prompt Example: In the last sentence of the article, the author calls the Panama Canal a **phenomenon**. Why is the Panama Canal a **phenomenon**?

- b. Have students **plan** their responses to the prompt before the discussion. A **written plan** is most effective.

Discussions

- c. Have students share their ideas with their **partners** before the discussion.
- d. Scaffold the discussion with sentence starters.
- e. Discuss in groups of four to six members.
 - One person shares their answer.
 - Others respond with agree or disagree OR
 - Others ask clarifying questions

Discussion sentence starters

Adapted from presentation by Kate Kinsella, Ph.D.

Agreeing

My idea is similar to _____ idea. I think _____.

My ideas expand on _____ idea. I think _____.

I agree with _____ and want to add _____.

Disagreeing

I don't agree with _____ because _____.

I have a different perspective from _____. I think _____.

My views are different from _____. I believe _____.

Discussion sentence starters

Adapted from presentation by Kate Kinsella, Ph.D.

Clarifying

Will you please explain _____.

What did you mean when you stated _____.

Could you please clarify your idea for me

Paraphrasing

What I hear you saying is _____.

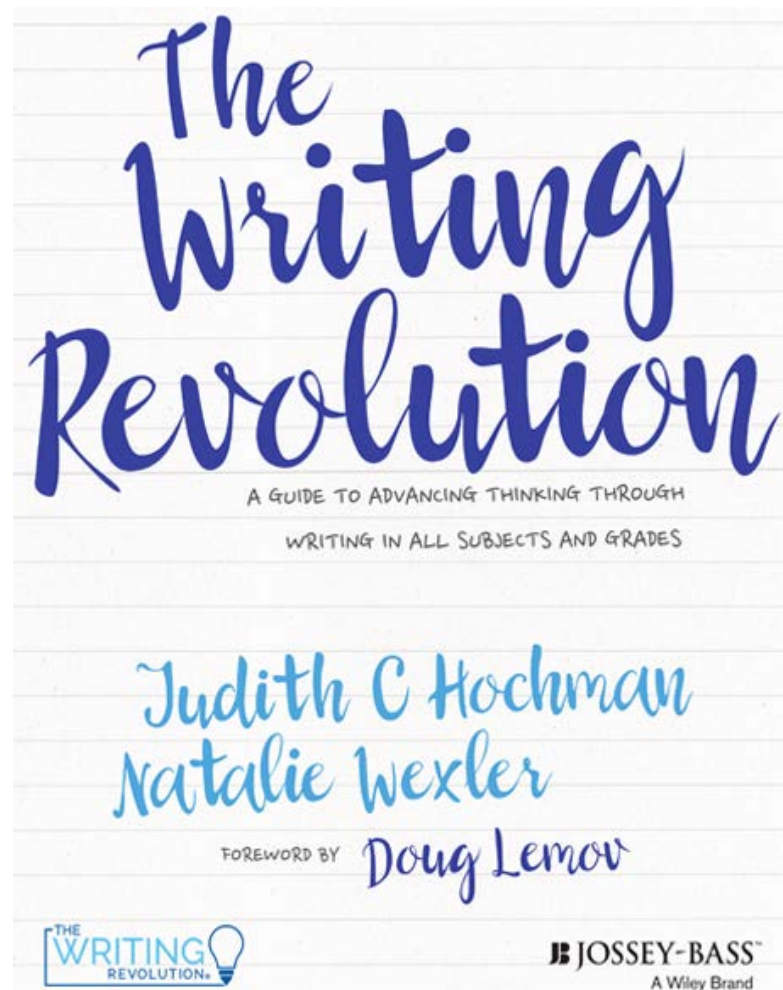
So you believe _____.

AFTER READING

Summary – Sentences

Resource

Hochman, J. C. & Wexler, N. (2017) *The writing revolution: a guide to advancing thinking through writing in all subjects and grades*. Jossey-Bass.



Sentence Expansion

Writing Revolution Judith Hochman & Natalie Welxer. 2018

Paragraph # 5 and 6

Start Sentence: A country started to build the Panama Canal but failed.

Who:

When:

Why:

Expanded Sentence:

Sentence Expansion

Writing Revolution Judith Hochman & Natalie Welxer. 2018

Paragraph # 5 and 6

Start Sentence: A country started to build the Panama Canal but failed.

Who: France

When: in 1879

Why: hot, rainy weather, tropical diseases, not enough money to finish the project

Expanded Sentence: In 1879, France started to build the Panama Canal but failed because of the hot, rainy weather, tropical diseases. and not enough money to finish the project.

Because But So

Writing Revolution Judith Hochman & Natalie Welxer. 2018

The Panama Canal is an amazing phenomenon because ...

The Panama Canal is an amazing phenomenon, but ...

The Panama Canal is an amazing phenomenon, so ...

Because But So

Writing Revolution Judith Hochman & Natalie Welxer. 2018

The Panama Canal is an amazing phenomenon because *it allows ships to quickly sail from the Atlantic Ocean to the Pacific Ocean. It is also amazing because of the sophistication of the engineering though it was build from 1904 to 1913.*

The Panama Canal is an amazing phenomenon, but *its construction cost thousands of workers their lives.*

The Panama Canal is an amazing phenomenon, so *it continues to be improved, transporting more and more ships from the Atlantic to the Pacific for the purposes of trade and tourism.*

AFTER READING

Summary – Writing Frames

Write a Summary - Writing Frames

Summary of Informational Text

Chapter: _____ Topic: _____

- In this passage, a number of critical points were made 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...

Write a Summary - Writing Frames

Summary of Informational Text

Chapter: _____ Topic: _____

- In this passage, a number of critical points were made about the building of the Panama Canal in the early 1900's. First, the authors pointed out that France was the first country to attempt to build the Panama Canal. This was important because many complications including hot temperatures, disease, deaths, and lack of funds forced the French to abandon the project. Next, the authors mentioned that the United States took over the project from the French after paying money to Panama and France. Furthermore, they indicated that the American officials worked to reduce the complications that interfered with the French project. For example, they built hospitals and sewage systems. This was critical because fewer workers became ill and died. Thus, the workers were able to complete the project by early 1913. Finally, the authors suggested that the Panama Canal is a phenomenon, a remarkable human built canal because it was built despite many complications and its engineering is amazing given that it was built in the early 1900's.

Before Reading Strategies - Review

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After Reading - Review

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Thank you

**How well we teach =
How well they learn**

**Teach with Passion
Manage with Compassion**