

8

Compare and contrast the text structure of events in two texts

Language Objectives

- Determine an author's purpose.
- Identify signal words and phrases.
- Describe text structure.
- Compare and contrast the structures of two or more texts.

Building Literacy

Comparing and contrasting texts will help students move beyond what is stated by an author by:

- analyzing an author's choices.
- determining which viewpoints the author includes and leaves out.
- making connections between ideas and across texts.
- examining text structures and relationships between ideas.

Focus on Language

Display the following vocabulary words that students will encounter in these texts. Have students create a T-chart comparing the meanings of vocabulary words to their roots or base words. For example, the root of *submarine* is *marine*, which means "related to the sea." The vocabulary word *submarine* means "a vessel that moves under the sea." (Spanish cognates are in parentheses.)

- submarine (submarino)
- unknown
- submersible
- assumptions
- unusual (inusual)
- exploration (exploración)



ENGLISH LANGUAGE LEARNERS

Provide your English learners with opportunities to interact with English-speaking classmates to enhance their language skills. Working in pairs or small groups will give English learners a chance to practice English in a relaxed environment.

➤

show me

In this lesson, students will read two texts about ocean exploration and compare and contrast the text structures the authors use to organize information.

Say: Today, you are going to read informational texts about ocean exploration that use different text structures. **Text structure** describes how an author has organized the text to connect information. Authors choose the text structure that best suits their **purpose**, or reason for writing, by clarifying the relationships between ideas and details. For example, if an author wants to inform about events that happened in history, he or she will likely use a **chronological**, or time order, structure.

Have partners turn and talk about the different types of text structures they have encountered in informational texts they have read or heard. Encourage them to discuss the different features of each type of structure. Ask volunteers to share the ideas they discussed.

➤

guide me

Use the chart in **guide me** to help students practice identifying why authors might use different types of text structures.

Read aloud the first row in the chart. Explain that texts organized by **chronological order** often include dates, years, or numbered steps to show the order of details or events. Discuss signal words related to chronological order, such as **first**, **next**, **then**, and **last**. Then ask volunteers to provide other possible topics that could have a chronological structure.

Next, have a volunteer read aloud the second row. Ask volunteers to name signal words related to **cause and effect**. Repeat for **problem and solution** and **compare and contrast**.

Finally, have students work in pairs to complete the chart with possible topics for informational texts that follow **cause and effect**, **problem and solution**, and **compare and contrast** structures.

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Compare and contrast the text structure of events in two texts

➤ show me

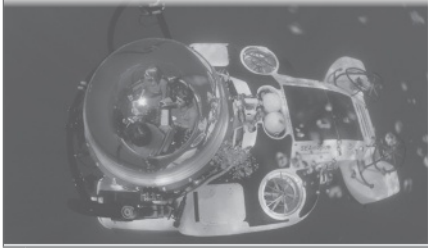
How does the author's purpose affect how events are organized?

➤ guide me

example

Identify topics for each type of text structure. The first one has been done for you. Possible responses:

Structure	Author's Purpose	Possible Topic
Chronological	describe an event from start to finish	History of ocean exploration
Cause and effect	show how one event causes another	Results of a science experiment
Problem and solution	describe actions that solve a problem	Training a dog to behave
Compare and contrast	show how things are alike and different	Rain forest to woodland forest



COMPARING TEXTS 29

VISUAL LITERACY

Some students may feel more comfortable demonstrating their knowledge of content area vocabulary through drawing instead of writing. Have students work in small groups to develop their own visual representation of each structure, such as a web or flow chart. Ask volunteers to share their visuals with the class.



work time

Introduce Vocabulary Write the following vocabulary words on the board: **submarine**, **unknown**, **submersible**. Point out the Spanish cognate for *submarine*. Then, have students use the words to make a prediction about the information the author might address in the text.

Read—Pause—Discuss Use the following interactive strategy to promote a strategic reading of the text.

Have student pairs take turns reading “Exploring the World Below” aloud. After each student reads two paragraphs, have him or her pause to ask his or her partner questions about what was just read. Have them continue the process until they finish reading.

Analyze Author’s Craft and Style: Signal Words and Phrases Review that an author often uses dates and time-order words to help show the order of events.

Point to paragraph 1 and the phrases “In the 1400s” and “Then, in 1531.” Discuss that the author is describing the early history of ocean exploration. She uses the dates to show the time between the widespread use of wooden ships and the invention of a diving bell.

Then, have partners scan paragraphs 3 through 5 to find other dates and time-order words. Ask volunteers to explain how the author uses the dates and words to show how advancements have occurred over time.

check for understanding by having students answer the questions about text structure. (The events are organized in chronological order. I can tell because the author tells about events from the early 1400s until today, with various dates mentioned in between.)

work time

Exploring the World Below

by Kathy Furgang

- 1 In the 1400s, people traveled across the oceans in grand wooden ships. These journeys caused many people to imagine what was below the surface; they were curious about the hidden world beneath the waves. Then, in 1531, Italian inventor Guglielmo de Lorena designed a diving bell.
- 2 A diving bell works like a cup turned upside down and pushed into the water. Air is trapped inside the bell just like it is in a cup. A diver in a diving bell breathed the trapped air until it ran out. Then the diver returned to the surface to refresh the air.
- 3 In the 1600s, an early version of a submarine was invented. However, for many years, most vessels designed to go underwater could only go a few hundred feet below the surface. Explorers wanted a device that could go into the deeper, unknown parts of the ocean, far from shore.
- 4 In 1930, scientists invented an underwater chamber called a bathysphere that could travel 1,428 feet below the surface. It had thick steel walls and could stand up against tons of water pressure. Another kind of submersible, the bathyscaphe, went even deeper.
- 5 By the 1960s and 1970s, submersibles were reaching even greater depths. These had a small compartment for the divers and a glass window for viewing the underwater world. Since that time, people have dived nearly 7 miles down into the deepest point in the ocean—the Mariana Trench in the Pacific Ocean.
- 6 At such depths, however, water pressure continues to be a danger for explorers. As a result, engineers have invented new submersibles that can be sent deep into the ocean while being operated by people from the safety of a ship on the surface. This type of vehicle is known as a Remotely Operated Vehicle, or ROV.
- 7 We can only guess what the future of ocean exploration will bring. Submersible technology will help answer more questions about the ocean and its living things.

check for understanding How are the events organized? How do you know?

CRITICAL LITERACY

To think critically, students must understand that the author has made specific decisions about the words and ideas she included in the text.

After reading, have them develop a list of questions they would like to ask the author about her background and experience with the topic. For example:

- What type of research did you do to find the information for this text?
- Have you ever been in a submarine or other type of submersible?
- What interests you the most about ocean exploration? Why?



work time

Introduce Vocabulary Write the following vocabulary words on the board: **assumptions**, **unusual**, **exploration**. Point out the Spanish cognates for *unusual* and *exploration*. Then, have student pairs use the words to ask each other questions. (For example: When have you made an *assumption*? What is an *unusual* animal you have seen? What other kinds of *exploration* have you read about?)

Read—Pause—Sketch Use the following interactive strategy to promote a strategic reading of the text.

Have student pairs take turns reading “Wonders Down Under” aloud. After each student reads two paragraphs, partners will pause and draw a sketch about an idea in that section. Prompt partners to share and discuss their sketches when they are finished reading the text.

Analyze Author’s Craft and Style: Objective Text If the author presents only one side of the topic based on his or her views, the text is considered **biased**, or **subjective**. On the other hand, if the author presents facts from multiple views without inserting his or her opinions, the text is **balanced**, or **objective**.

Ask a volunteer to read aloud paragraph 2. Then, discuss how the author shows different views people have had about the ocean floor. (Some people imagined sea monsters, and sailors made up stories about them. Other people thought nothing could survive that far down in the “dark, cold depths of the ocean.”) Emphasize that the author does not insert her opinions, but just presents others’ views.

Then have partners review paragraphs 4 and 5 and discuss how the author presents facts about different ways people have measured depth in the ocean. (People in ancient Egypt used sounding lines. In the early 1900s, scientists began using echoes.) Ask volunteers to confirm whether or not the author includes her own opinions. (No, she does not include her opinions.)

check for understanding by having students complete the analogy. (Using submarines to explore is to cause as finding unusual sea creatures is to effect.)

Compare and contrast the text structure
of events in two texts **8**

work time

Wonders Down Under
by Helen Byer

<p>1 People have always wondered what might be at the bottom of the sea. For thousands of years the ocean floor remained a complete mystery.</p> <p>2 People were left to imagine sea monsters, such as giant snakes and dragons writhing in the watery depths. Sailors made up many stories about them—some claimed to have actually seen them. Ancient maps were often decorated with pictures of fearsome ocean beasts. Other people, however, thought the exact opposite, believing that nothing could possibly survive in the dark, cold depths of the ocean.</p> <p>3 Because humans lacked the technology, they could only make assumptions about what lay deep below the water’s surface. They also used whatever rudimentary technology was available to probe the ocean’s mysteries.</p> <p>4 For example, people in ancient Egypt measured the depth of rivers and seas by dropping weights attached to long lines. This tool is called a sounding line. The length of the line showed how</p>	<p>deep the water was. Later, in the 1500s, explorers and scientists used sounding lines to measure the ocean’s depth. In 1872, the crew of the ship <i>HMS Challenger</i> mapped parts of the ocean floor.</p> <p>5 In the early 1900s, scientists began using echoes to measure depth. A sound is sent to the ocean floor. Then they record how long it takes for the echo to bounce back. This information is used to figure out how deep the water is.</p> <p>6 Today, we use submarines and submersibles to explore the ocean. These machines have found some unusual sea creatures. Among these creatures are fish with huge mouths filled with needle-sharp teeth and tubeworms that live in places where hot water gushes from the ocean floor.</p> <p>7 Some experts estimate that less than five percent of the deep sea has been explored so far. Like space, the deep ocean is a frontier in its earliest stages of exploration.</p>
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check for understanding Look at paragraph 6 and complete the analogy:
 Using submarines to explore is to cause as _____ is to effect.

COMPARING TEXTS **31**

VISUAL LITERACY

Graphic organizers can help students make sense of and connect unfamiliar concepts in science texts. Have students use events from both texts to complete a timeline about ocean exploration. Ask volunteers to share their timelines and record their ideas in a large timeline on the board.



check for understanding

Analyze Author's Craft and Style Have students work with a partner to answer the **check for understanding** questions.

If students struggle to contrast text structures, use a Think Aloud to model how a critical thinker would approach the texts.

Think Aloud First, I will look back at each text and review the signal words and phrases the author uses to connect ideas. I see that the author of "Exploring the World Below" includes dates and time-order words to show how ocean exploration has advanced over time. This text is written using a chronological structure.

In "Wonders Down Under," though, the author uses several different structures to connect ideas about ocean exploration. A compare-and-contrast structure shows how people had different ideas about sea creatures. A cause-and-effect structure is used to explain why ancient people did not know much about the ocean. A problem-and-solution structure explains the problem of figuring out ocean depth and how people came up with new inventions to address it.

Identify Text Structure Guide students to reread the listed paragraphs from "Wonders Down Under" and circle any signal words or phrases related to text structure. For example, point out that **however** usually indicates a **compare-and-contrast structure** while **because** often indicates a **cause-and-effect structure**.



reflect

Have partners work together to compare the structure of the texts and discuss which organization is better for achieving the author's purpose. Point out that the second part of the task is asking for opinions, so students may disagree in their answers. Encourage students to support their views using evidence from the texts.

check for understanding

- 1 What do you think the author of "Exploring the World Below" wants to achieve? Is she successful? Explain your answer.
The author wants to explain how ocean exploration improved over time. She succeeds by showing how technology helped that exploration.
- 2 After reading "Wonders Down Under," do you look at the ocean any differently? Explain your answer.
Possible response: Yes, I see the ocean as an unexplored area the way space is. The text says the ocean is "in its earliest stages of exploration."
- 3 How are the two texts organized in different ways?
Possible response: The first is chronological to show how technology evolved. The second uses multiple structures to discuss ocean exploration.
- 4 How is the point of view about ocean exploration different in the two texts?
Possible response: The first author focuses on technology that allows ocean exploration. The second focuses on how ocean depth is measured.
- 5 Draw lines to match the paragraph numbers in "Wonders Down Under" with the way that each paragraph is organized.

Paragraph 2	Chronological
Paragraph 3	Compare and Contrast
Paragraph 4	Problem and Solution
Paragraph 5	Cause and Effect

reflect

With a partner, compare the structure of both texts. Discuss which type of organization is better at achieving the author's purpose, and why.

CRITICAL LITERACY

To foster further inquiry and connections, assign small groups other topics related to ocean exploration, such as a famous marine biologist, a unique deep-sea creature, or an advanced sea vessel. Allow time for reading and discussion, encouraging students to consider the text structure they would use if they were writing a report on the topic.

Then, rearrange the groups so each new group has one member from each of the first groups. Have students compare and contrast the information they uncovered across topics, and guide them to make connections to "Exploring the World Below" and "Wonders Down Under."

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➤ show me

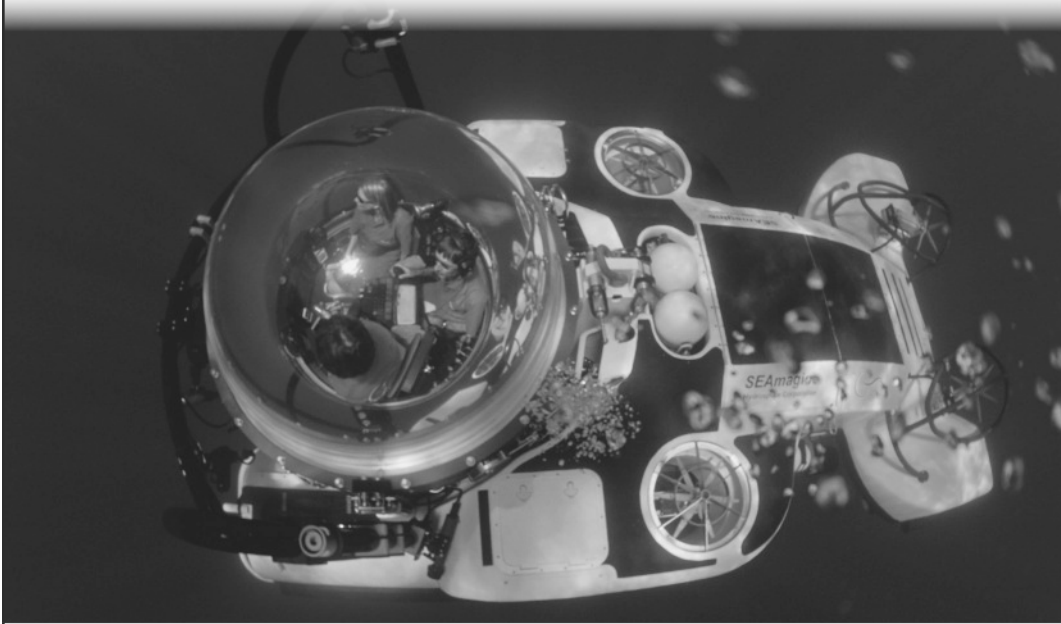
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➞ check for understanding

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