

Introducing Text Structures in Writing-5th Grd

Summary

This activity introduces students to the idea that science writing is organized in identifiable patterns called text structures. Understanding and using these different text structures help refine students' abilities to both read and write in science.

Main Core Tie

English Language Arts Grade 5

[Reading: Informational Text Standard 5](#)

Materials

- [Text Structure Sample Sentence Strips](#) (pdf)
- [Text Structure Word Cards](#) (pdf)
Science text materials such as textbooks, trade books, and magazine articles
- [Text Structure Samples](#) (pdf)
- [Text Structure Definition posters](#) (pdf)
- [Text Structure Graphic Organizer posters](#) (pdf)

Additional Resources

Teacher Resources on Nonfiction Writing

Books

- *6+1 Traits of Writing: The Complete Guide (Grades 3 and Up)*
, by Ruth Culham (Chapter 3, Organization-Herding Cats, p. 68-99); ISBN 0-439-28038-9
- *Guiding Readers and Writers (Grades 3-6): Teaching Comprehension, Genre, and Content Literacy*
, by Irene C. Fountas and Gay Su Pinnell (2001); ISBN 0-325-00310-6
- *Nonfiction Matters: Reading, Writing, and Research in Grades 3-8*
, by Stephanie Harvey (1998); ISBN 1571100725
- *Supporting Struggling Readers and Writers: Strategies for Classroom Intervention, 3-6*
, by Dorothy S. Strickland, Kathy Ganske, Joanne K. Monroe (2002); ISBN 1-57110-055-5
- *Raptor! A Kid's Guide to Birds of Prey*
, by Christyna Laubach, Rene Laubach, and Charles W.G. Smith (2002); ISBN 1580174450

Informational Science Trade Books

As you develop resources for teaching text structures, begin with texts you already have in your classroom. You will find text structures in all expository writing. The following list of trade books has fifth grade science core connections that contain examples of the text structure listed. You could also find these text structures in Social Studies Texts

Description

- *Electricity (Science Alive!)*
, by Darlene Lauw (2002); ISBN 0-77870-561-7
- *Extremely Weird Animal Defenses (Extremely Weird)*
, by Sarah Lovett (1997); ISBN 1-56261-358-8
- *Volcanoes*
, Seymour Simon; ISBN 0-688-14029-7
- *Mixtures & Compounds (Library of Science)*
, by Alastair Smith, Phillip Clarke, and Corinne Henderson (Usborne Pub. Ltd., 200s); ISBN 0-7945-0082-X

- *Why Do Volcanoes Blow Their Tops?: Questions and Answers about Volcanoes and Earthquakes*
 , by Melvin and Gilda Berger (1999); ISBN 0-439-09581-6

Sequence

- *Glaciers*
 , by Larry Dane Brimner (2000); ISBN 0516271911
- *I Didn't Know that Quakes Split the Ground Open*
 , by Clare Oliver; ISBN 0-7613-0795-8
- *Zap It! Exciting Electricity Activities*
 , by Keith Good; ISBN 0-8225-3565-3
- *Volcano: The Eruption & Healing of Mount St. Helens*
 , by Patricia Lauber (1986); ISBN 0689716796
- *Electricity (Science Alive!)*
 , by Darlene Lauw (2002); ISBN 0-77870-561-7
- *Chemistry*
 , by Chris Oxlade (1999); ISBN 0-8172-4948-6

Compare and Contrast

- *How Plants Survive*
 , by Kathleen V. Kudinski (2002); ISBN 0791074226
- *Chemistry*
 , by Chris Oxlade (1999); ISBN 0-8172-4948-6

Cause and Effect

- *The Seven Wonders of the Natural World (Wonders of the World)*
 , by Reg Cox and Neil Morris (2001); ISBN 0-7910-6049-7
- *Zion National Park*
 , by Mike Graf (2004); ISBN 0-7368-2222-4
- *Electricity (Science Alive!)*
 , by Darlene Lauw (2002); ISBN 0-77870-561-7
- *Planet Earth: All the Wonders of Our Blue Planet and the Secrets of a Vast Universe*
 , by Diane Costa De Beauregard; ISBN 0 88682-953-4
- *Bryce Canyon National Park*
 , by David Peterson (1996); ISBN 0-516-26094-4

Problem and Solution

- *Shocking Science: Fun & Fascinating Electrical Experiments*
 , by Shar Levine and Leslie Johnstone (1999); ISBN 0806922710

Background for Teachers

Reading and writing are essential skills in science. This activity introduces students to the idea that science writing is organized in identifiable patterns called text structures. Understanding and using these different text structures help refine students' abilities to both read and write in science. The following five patterns are commonly found in science writing:

Description	Cause and Effect
Sequence	Problem Solution
Compare and Contrast	

A close reading of the Science Core Curriculum Standards, Objectives, and indicators suggests when writing might be used as part of science instruction. Verbs such as "describe," "compare," and "explain" signal that writing is an appropriate activity for that objective. That is not to say writing should be the only activity. Inquiry experiences and other hands-on science activities should be the

center of science instruction. Writing is a good way to help students clarify their thinking, unite the big ideas in an objective, and to assess learning.

Because this lesson focuses on writing skills, it may actually be best taught in the language arts block. Writing is the perfect way to integrate science and language arts. Science gives students something—topics—to write about. Writing helps solidify understanding in science.

Intended Learning Outcomes

1. Use Science Process and Thinking Skills
3. Understand Science Concepts and Principles
4. Communicate Effectively Using Science Language and Reasoning

Instructional Procedures

Invitation to Learn

Show students the *Text Structure Sample Sentence Strips*, then post them on a chart or the board. Explain that science writing is often expository writing--writing that explains information and ideas--and that it is organized in different patterns called text structures. Show them the *Text Structure Word Cards*. Have students read the *Text Structure Sample Sentence Strips* and match them with the *Text Structure Word Cards*.

This activity may be done with the whole class or in a small group setting.

TEXT STRUCTURE	EXAMPLE
DESCRIPTION	Golden Eagles are powerful raptors with large dark brown bodies and small heads with golden crowns.
SEQUENCE	First Golden Eagles soar high along ridges near their nests. They search for prey. When a meal is spotted, they attack in a long swoop.
COMPARE AND CONTRAST	Golden Eagles are apt to hunt for prey while Bald Eagles are more likely to take an easy meal.
CAUSE AND EFFECT	So many Bald Eagles were killed by pesticides and illegal hunting that they were in danger of becoming extinct.
PROBLEM AND SOLUTION	When a raptor species declines, scientists take wild bird eggs to raise in captivity and increase the number of birds.

Instructional Procedures

These procedures use direct instruction to explicitly teach students different science text structures. The same general process is used for teaching each text structure. Ideally, you should introduce and model each text structure separately. Next, give repeated practice in identifying the structure and then continue to reinforce it as it is encountered in science texts. When the students are proficient at identifying and understanding the organization of the structure, teach them to use it in their own science writing. Three writing activities that use specific text structures are included in this handbook: [Using Description to Write in Science](#) , [Using Compare and Contrast to Write in Science](#) , and [Using Cause and Effect to Write in Science](#) .

Select a short passage of science writing that exhibits the kind of text structure you want to teach. The writing may be from a science text you use, a science trade book, a magazine article, or a piece of student writing. *Text Structure Samples* that go with the fifth grade Science Core are included. Representative trade books are listed in *Additional Resources*.

Provide students with copies of the text you are going to read. This may be a textbook, a set of books for a small reading group, a student news magazine, a photocopy of a science article, or an overhead transparency of a short text.

Tell students that you want them to follow along as you read a piece of science writing. Explain that you will think out loud as you read it. Share your thoughts about the things you notice about the structure of the writing. Point out words and phrases that signal how the passage is organized. You may want to use a second piece of writing with the same text structure and have students share their thinking as you read and look for clues about how it is organized.

Show students a *Text Structure Definitions* poster and a *Text Structure Graphic Organizers* for text structure. Display the poster and graphic organizer. Or you may create your own definition of the text structure with your class and display it.

Reread the passage with the class. Look for the features of the particular text structure. Have students use highlighters or sticky notes to mark text features. The following chart summarizes the main features of the text structures.

TEXT STRUCTURE	FEATURES OF THE TEXT STRUCTURE
DESCRIPTION	Main idea, unique features, supporting ideas, examples.
SEQUENCE	Lists in order a series of events, steps in a process.
COMPARE AND CONTRAST	Lists and explains similarities and differences of two ideas.
CAUSE AND EFFECT	Explains causes or reasons and the results or effects.
PROBLEM AND SOLUTION	States a problem and possible solutions or answers.

Have students look for words or phrases that help signal what kind of text structure a passage is. These are often transition words that lead from one sentence or idea to the next. Have students mark the words with a highlighter or sticky note. Make a class list of these signal phrases. The chart below summarizes the signal words and phrases typical of each text structure.

TEXT STRUCTURE	KEY WORDS FOUND IN THE TEXT STRUCTURE
DESCRIPTION	for example, involves, can be defined, for instance, on, over, next to, also, within
SEQUENCE	to begin with, first, second, in addition, next, then, last, finally, another, also, earlier, later
COMPARE AND CONTRAST	different from, same as, alike, like, similar to, unlike, as well as, yet, either...or, not only...but also, although, most, however, on the other hand, opposite, opposed to, while
CAUSE AND EFFECT	because, so that, thus, unless, therefore, since, in order to, as a result of, this led to, then, reasons for, then...so, for this reason, consequently, an explanation for
PROBLEM AND SOLUTION	problem is, a solution is, solved by, alternative, possible answer, therefore, conclusion, evidence is, a reason for

Refer to the graphic organizer for the text structure you are teaching. Together with the class,

separate the parts of the text and write them in the graphic organizer. It might be drawn on the board, chart paper, or on an overhead transparency. Display the graphic organizer for the class to refer to.

Have students practice looking for other examples of the text structure in their science reading. Repeat the process with other text structures throughout the year.

Extensions

Teach the science text structures in small reading groups for more individualized instruction and practice.

Post *Text Structure Definition* posters and/or *Text Structure Graphic Organizer* posters on a bulletin board for reminders and easy reference.

Use the text structures for other informational reading and writing, for example, in social studies. Show samples of student work that are examples of different text structures.

Assessment Plan

Use informal assessment to check for understanding in reading discussions. Reteach in small guided-reading groups as necessary. Give students examples of several different text structures and have them identify the text structures.

Authors

[Utah LessonPlans](#)

[brooke rauson](#)