Using Fiction and Nonfiction to Teach Science

Grade 4 (differentiated for grades 3 through 6)

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Abstract

There have been many exciting ideas described in each of the articles assigned. It has been a difficult task to choose one to discuss. The information and suggestions within the readings, has had a positive effect on literacy lessons. As a result, more nonfiction and expository texts have been part of our literacy block. As mentioned in our discussions, teachers use a standard Basal program for reading in our school. The book contains many exciting stories from a variety of genres. Unfortunately, the students are often bored and unresponsive to the comprehension questions that follow each selection. As we work our way through the Basal, the students become excited about reading choices that focus on science and the world around them. Their reactions to nonfiction and expository texts guide our ELA block.

Last year's students' favorite piece was a nonfiction selection called *Coral Bleaching*. After reading the story, the students researched coral reefs that suffered and were no longer vibrant. This story led to discussions about the effects of coral bleaching on food webs. The students also made lists to describe the many ways they could reduce their carbon footprints.

Although their enthusiasm consumed more literacy periods than planned, the students' understanding of these concepts went beyond expectations. The lessons bridged social studies and science curriculums as we began to study the population growth along the Hudson River. The class realized as more people moved into an area habitats and ecosystems were affected.

A read-aloud of The Lorax by Dr. Seuss concluded the unit. Although the class knew the book, the children never related it to science. While reading, they soon realized that human needs could have a negative impact on ecosystems. Dr. Seuss did an excellent job focusing on the subject of deforestation throughout this masterpiece.

Targeted literacy skills such as identifying cause /effect, compare/contrast, main idea, sequencing, inferencing, and theme developed throughout the lessond. As students became aware of the curriculum connections, they asked more questions about deforestation, habitat loss, and the long-term effect of greenhouse gases. As a result, the learning continued, and their thinking deepened. A spark had ignited a fire for researching and finding more information about the topic. Incorporating nonfiction science-based stories and blending them with fiction books resulted in a stronger understanding of our science content.

Recently, the class read an article from Newsela called “What is a Hurricane?” and compared information found in the historical fiction book I Survived Hurricane Katrina, 2005, by Lauren Tarshis. Before reading, the students created a list of questions about hurricanes.

Since Hurricane Florence was ripping through the east coast, this was an appropriate topic to address. Students read leveled versions of the article in small groups using the reciprocal teaching model. I Survived Hurricane Katrina encouraged the students to work in teams predicting, questioning, clarifying, and summarizing. Soon, the class was fascinated with hurricanes. They decided to make posters with directions on how people should prepare for these dangerous storms.

As the year progresses, these are the types of learning experiences that will inspire critical thinking, communication, and problem-solving.

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