

Using Varied Nonfiction Sources and Different Literacy Strategies for Content-Area Learning

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Abstract

In this article, the importance of including different nonfiction sources and varied literacy techniques in content-area instruction is discussed. First, a definition of nonfiction is presented. Next, selected strategies for activating students' prior knowledge; promoting an understanding of topic-specific vocabulary; encouraging text discussions and questions; and responding to nonfiction reading by means of writing, the creative arts, and extended research are presented. Interspersed throughout this article are three sample activities that are specific to a nonfiction text for implementation in a language arts/social studies, mathematics, or science class. It is emphasized in this article that nonfiction "can provide students with authentic reading experiences that connect with their lives and expand background knowledge needed to understand core content-area concepts" (Olness, 2007, p. 5).

In the introduction of the *Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects* (Council of Chief State School Officers and the National Governors Association, 2010), the authors state that students (Kindergarten-12th grade) should have multiple opportunities in all content subjects to "actively seek the wide, deep, and thoughtful engagement with high-quality literary and informational text that builds knowledge, enlarges experience, and broadens world views" (p. 3). Thus, the inclusion of varied literary genres and different literacy strategies in all content areas (i.e., literature, science, social studies, and mathematics) has become a *hot* topic in education for 2012. Educators are seeking optimal text suggestions and instructional techniques that will facilitate students' reading, writing, and discussion of varied content knowledge in order to foster deep understanding of the topics being studied. Teachers can "help students become independent learners by creating a classroom culture that devotes time, concern, and energy toward explicit instruction of how tasks might be accomplished and why certain strategies might be effective for certain tasks" (Anders & Guzzetti, 2005, p. 68).

In this article, the importance of including different nonfiction sources and varied literacy techniques in content-area instruction is discussed. First, a definition of nonfiction is presented. Next, selected strategies for activating students' prior knowledge; promoting an understanding of topic-specific vocabulary; encouraging text discussions and questions; and responding to nonfiction reading by means of writing, the creative arts, and extended research are presented. Interspersed throughout this article are three sample activities that are specific to a nonfiction text for implementation in a language arts/social studies, mathematics, or science class. It is emphasized in this article that nonfiction "can provide students with authentic reading experiences that connect with their lives and expand background knowledge needed to understand core content area concepts" (Olness, 2007, p. 5).

Nonfiction Defined

"Nonfiction is the literature of fact – or the product of an author's inquiry, research, and writing. Its primary purposes are to provide information, explain, argue, and/or demonstrate" (Kristo & Bamford, 2004, p. 12). The nonfiction genre consists of various literary types such as picture books, trade books, primary sources, brochures, manuals, photo essays, how-to books, almanacs, world record books, newspapers, magazines, biographies/ autobiographies, and the Internet (Pike & Mumper, 2004). Some nonfiction books are dense with factual text and contain some illustrations, photographs, and diagrams to support the text. Others are replete with multiple photographs and illustrations that provide as much information as do the author's words. No matter which format the nonfiction writer chooses to represent the content, nonfiction supports students' learning to read from texts other than the narrative genre, and thus, facilitates the pupils' reading to learn new content.

Unlike narrative texts that follow a predictable story grammar format (i.e., setting; characters; problem; plot; resolution; beginning, middle, and end), nonfiction texts are arranged by different organizational structures. These organizational formats include enumeration, sequential, chronological, compare-contrast, cause-effect, question-answer, and narrative. Since students may be unfamiliar with the varied organizational structures found in informational texts, it is often necessary for the instructor to directly teach the different structural formats employed by nonfiction authors in order for the students to acquire a deep understanding of the information presented. Optimal instruction followed by direct practice by the students may consist of the pupils exploring and reading various nonfiction, with the teacher guiding the pupils to recognize the specific structure employed in the text. Additionally, students should be taught to recognize certain words that signal a particular text structure. Common text structures and associated signal words include the following: sequencing (*until, before, after*); compare-contrast (*however, similarly, likewise*); cause-effect (*since, thus, because*); question-answer (*how, when, what*); and problem-solution (*one reason for that, a solution, a problem*) (Dole, 1997 as cited in Harvey, 1998). When students recognize a certain structural format in nonfiction, they are able to more easily process and recall the information.

In addition to the different organizational patterns found in nonfiction, these books also contain a variety of features that are unique to informational publications. These nonfiction text elements include access features (e.g., table of contents, introduction, headings); features for determining accuracy (e.g., copyright data, biographical information, acknowledgements); and visual information (e.g., illustrations, photographs, diagrams, graphs, tables, maps) (Kristo & Bamford, 2004). Students need to be explicitly taught how to employ the various print and visual components of an informational source in order to gain a complete and in-depth understanding of the content. Thus, as teachers are instructing students how to use the various nonfiction text characteristics to access information, the pupils should be provided with guided practice in recognizing and using varied text features located in different nonfiction books.

Sample Activities to Activate Prior Knowledge of the Content Subject

Learning to effectively read a nonfiction text is important in understanding the information located in the source. Successful reading and comprehension of nonfiction depends on various pre-reading techniques that prepare students for the reading task. These prior reading activities begin with students initially exploring the book to discover different features unique to nonfiction that allow the text and its information to become accessible to the reader. Following this introductory examination of the text's distinctive characteristics, the students should be provided with varied exercises to activate their prior knowledge of and experience with the book's content. Three effective prior knowledge activation techniques are the KWL Procedure (Ogle, 1986) in which the students brainstorm what they know (K), what they would like to learn (W), and after reading, what they learned (L); a Quick Write in which the pupil writes for 3-5 minutes everything he/she knows about a topic; and Think-Pair-Share in which students respond to teacher-posed questions first individually, then with a partner, and finally with the whole class.

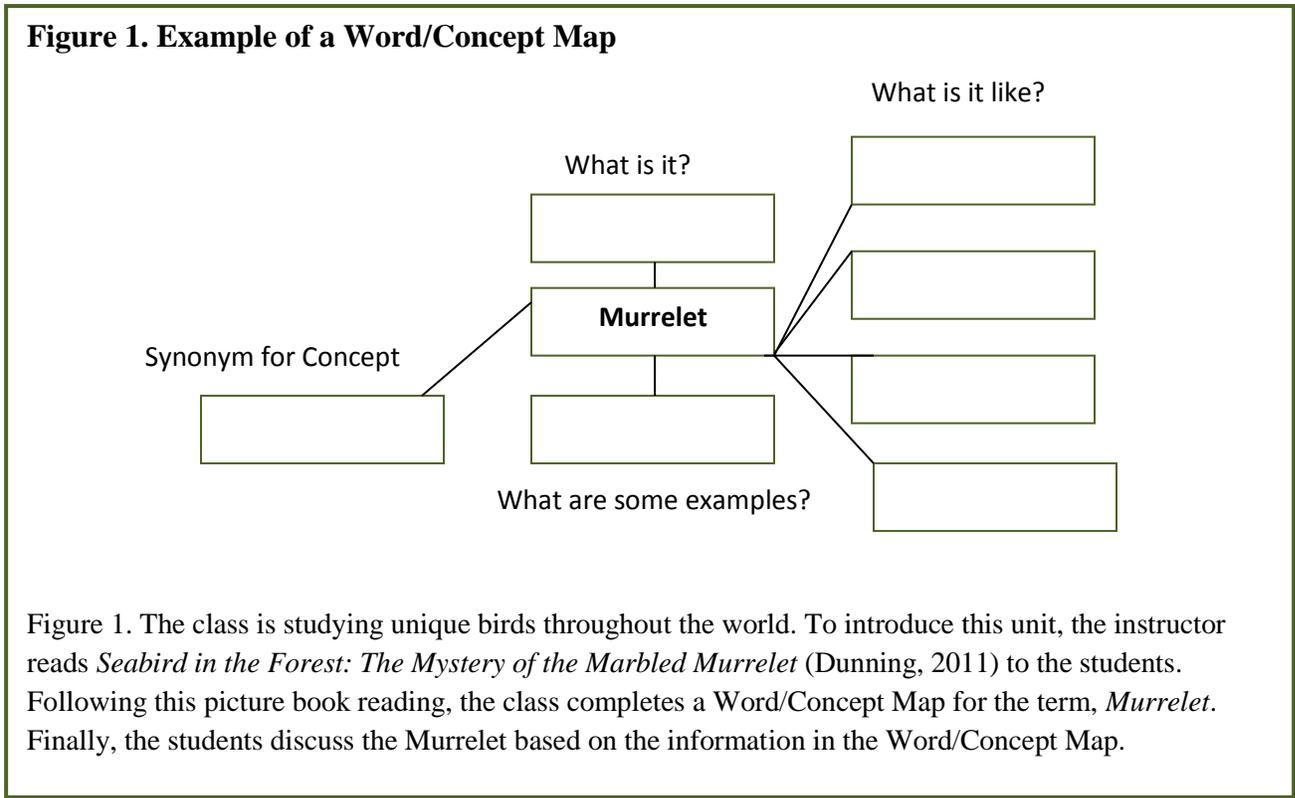
Although these prior knowledge strategies are not new, by conducting these activities before reading, the instructor can discover what the students already know about the information contained in the text, and any misconceptions the pupils have regarding the topic. The teacher also can plan subsequent instruction that needs to take place in order to ensure successful comprehension of the text type and subject.

Sample Techniques to Acquire Word Knowledge

In addition to including specific activities to evoke students' prior experiences and knowledge regarding the topic of the nonfiction text, teachers should include varied exercises that focus on new, unique, and sometimes challenging terms and concepts the students will be encountering in their reading. When a pupil demonstrates difficulty comprehending a text, and word recognition is not the reason for the difficulty, then often the problem is caused by lack of

familiarity with a particular term. Therefore, there are different strategies the instructor can introduce to the class to help focus the students' attention on specific terms/concepts that are located within the nonfiction text, and that are paramount to the pupils' comprehension of the content. These techniques can be directly taught by the teacher and practiced by the students before, during, and after reading. The List-Group-Label Procedure (Wood, 2001), in which students categorize words that represent the same concept; the creation of individual word banks of novel words; and the comparison of concepts by means of a Venn Diagram are relevant activities that can be employed to instill understanding of new words and concepts. A Word/Concept Map (Schwartz & Raphael, 1985) is a most relevant vocabulary strategy to be used in science learning as exemplified in Figure 1.

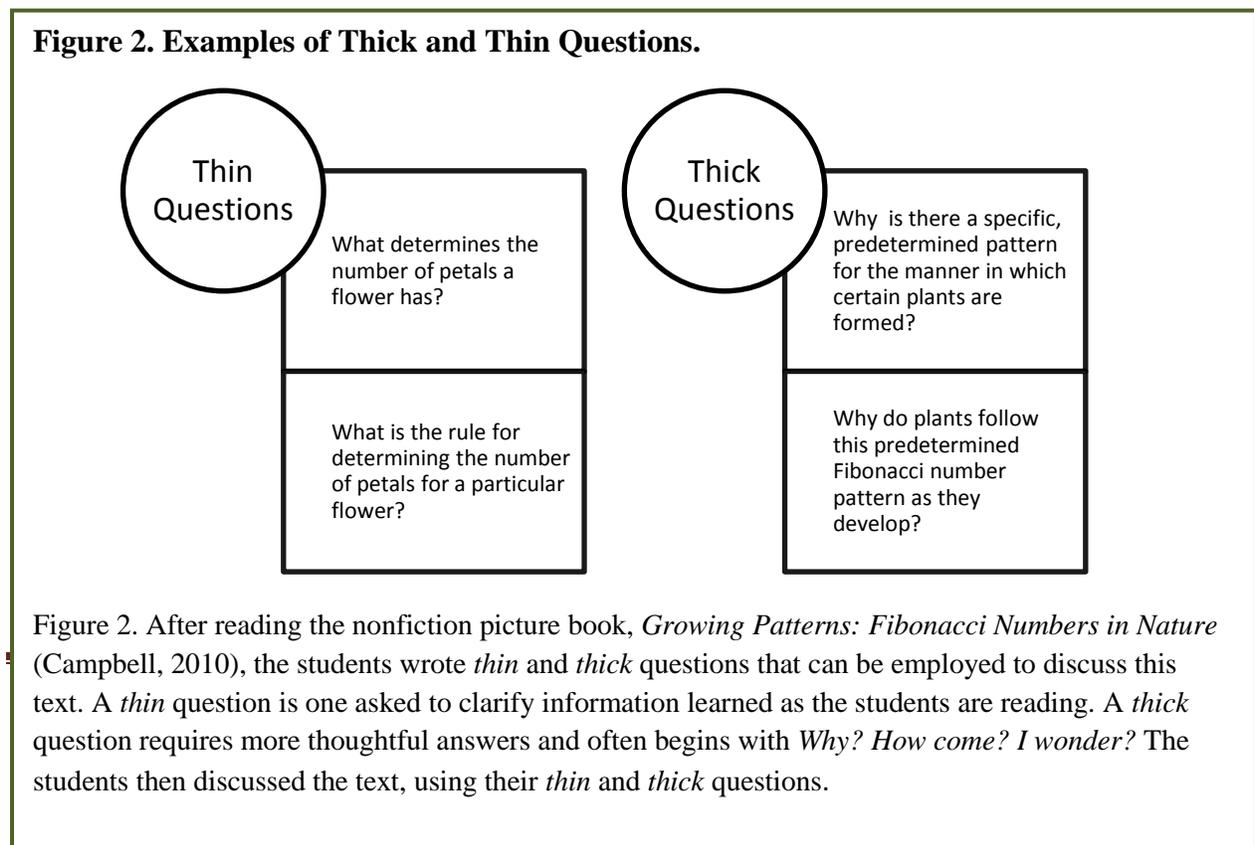
While these techniques were developed several years ago, they are still effective for aiding students' understanding of complex terms and concepts found in nonfiction. From observing the students in the classroom or from recent assessments conducted by the instructor, the teacher can decide which activity to use, and how many words to include in the practice based on the complexity of the text, the age/grade level of the students, the pupils' prior knowledge/experiences with the content, and the reading abilities of the students.



Activities to Promote Questions and Discussion

In addition to including prior knowledge and vocabulary activities in content-area lessons, instructors need to provide a classroom environment that encourages learners to become actively involved in the texts they are reading. When students are active readers, they question the author's background and research, purpose for writing the text, point of view toward the book's content, style of writing, and choice of words. They also become metacognitive readers as they inquire about their own thinking and reading, especially when the text does not make sense to them. Pupils need to be directly taught how to engage in text reading and not to be passive receivers of information. Through teacher modeling of think-alouds in which instructors demonstrate their own thinking and text interactions as they are reading, the students discover the value of critically reading and analyzing a text. Questions the pupils pose to themselves when reading silently, ask each other during text discussions, and exchange with the instructor during teacher/student discourse allow the pupils to delve deeply into the text and to increase their reading comprehension.

There are different types of questioning and discussion procedures in which students can participate as they read and interact with nonfiction. These various strategies can be employed before, during, and after reading and, depending upon the particular activity, involve individual queries or partner, small-group, or whole-class interactions. Question of the Day in which students are invited to develop questions to guide the day's reading and discussion; Key Questions (Stephens & Brown, 2005) in which pupils discuss information in the text by using the questions: *Who? What? When? Where? How?* and *I Wonder Why?* (Manzo, 1969) in which the teacher models and the students practice wondering about the new information being learned are examples of effective discussion/questioning techniques. In the following example, students practice asking and answering Thick and Thin Questions (Harvey & Goudvis, 2007) during a mathematics lesson.



Response Techniques to Nonfiction

Once students have read and discussed a nonfiction text, there are various avenues of response to this reading. First, pupils can respond to the book by means of writing. Writing allows for thoughtful reflection of the reading experience. When students write, they often use the text they just read as a model for their own writing. Sample written response techniques include composing exit slips in which pupils respond and summarize the day's reading, dialogue journals in which students personally respond to the reading, content-related picture books in which pupils describe the text content through illustrations and words, and learning logs in which students share their own interpretations regarding the information presented in the text.

Additionally, responses to reading by means of the creative arts allow pupils to practice multiple intelligences such as linguistic, logical-mathematical, visual-spatial, kinesthetic, musical, intrapersonal, interpersonal (Gardner, 1983). There are varied response avenues involving the creative arts. First, students can create a poster reflecting the key information found in the nonfiction text. Second, they can reenact a particular event or process presented in the book. Third, they can scribe and present a rap song to represent the key information learned from their reading.

Finally, students can conclude their reading of nonfiction through extended research regarding the same topic as the book and by sharing their research with others. An example of a research-based response activity is the I-Search Paper (Macrorie, 1988). Using various print and electronic sources, pupils conduct further research and present this research in an I-Search paper, which includes prior knowledge regarding the topic, a rationale for researching the topic, a description of the research sources used, and a discussion regarding what the student learned about this topic.

Whether students respond to this nonfiction reading through writing, the creative arts, or extended research, the teacher should provide different response forms from which the pupil can choose. In this way, the student should have true ownership of the particular activity.

Final Thoughts

Throughout this article, the value of including varied nonfiction sources and different literacy strategies in content area instruction has been discussed. "A nonfiction book...has many layers....They reveal different aspects of the topic and different levels of meaning" (Giblin,

2009, p. 37). It is the educator's responsibility to guide his/her students to uncover these multiple layers of information found in nonfiction and content-related textbooks in order for these literacy experiences to be as accessible and rewarding as possible for all learners.

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