

Informational Text and Young Children:

When, Why, What, Where, and How

by Dr. Nell K. Duke

OPPORTUNITIES to read and write informational text are a key part of *National Geographic Science*. In this paper, I discuss when, why, what, where, and how to use informational text with young children.

When?

There is broad consensus that informational text is appropriate even for young children. One study found that kindergarten children can learn the language of information books through having these books read to them in school (Duke & Kays, 1998). Another study found that children whose first grade teachers included more informational text in classroom activities and environments became better writers of informational text and had more positive attitudes toward reading by the end of first grade (Duke, Martineau, Frank, & Bennett-Armistead, 2008). In *National Geographic Science* children are reading, writing and listening to developmentally appropriate informational text in kindergarten and throughout the elementary grades.

Why?

Given opportunities, young children can successfully listen to, read, and write informational text, but why should they? One reason is that informational text can be an important tool for learning. In *National Geographic Science*, informational text works in tandem with rich inquiry experiences to build children's understanding of big ideas in science. Experience with informational text is also important to literacy development. Most literacy standards documents and assessments expect that children can read and write informational text successfully by fourth grade or earlier. For example, the 2009 National Assessment of Educational Progress (NAEP) fourth grade assessment has fifty percent

informational text (National Assessment Governing Board, 2007).

Another important reason to include informational text in curriculum and instruction for young children is that some young children really *prefer* this kind of text. Educators Ron Jobe and Mary Dayton-Sakari (2002) call these children "Info-kids," and I have encountered many of them in my work. When we offer these children only storybooks and story-writing activities, we deny them the opportunity to read and write the kind of text they find most engaging.

What?

The National Assessment of Educational Progress 2009 Framework (National Assessment Governing Board, 2007) uses a broad view of informational text as including expository text, persuasive text, and procedural text. *National Geographic Science* features these along with nonfiction narrative, or true stories. Although all four of these types of text are often given the general label "informational text," they differ in both purpose and features (e.g., Duke & Tower, 2004; Purcell-Gates, Duke, & Martineau, 2007). Following are the purposes and a few common features for each kind of text.

Expository Text

Purpose: Convey Information about the Natural or Social World

Some Common Features:

- Uses specific organizational patterns such as compare/contrast
- Includes definitions or explanations of words that may be unfamiliar
- Employs graphics such as diagrams to convey information

Persuasive Text

Purpose: Persuade People to Think or Do Something

Some Common Features:

- Presents a position supported by evidence or reasons
- Employs devices such as strong language to incite to action
- Uses graphics to persuade

Procedural Text

Purpose: Give Directions for Doing Something

Some Common Features:

- Includes a materials list and steps to follow
- Employs units of measurement and other devices for specificity
- Uses graphics to show steps and the expected result

Nonfiction Narrative

Purpose: Tell a True Story

Some Common Features:

- Relays events in chronological order
- Presents a problem and resolution
- Uses devices such as photographs or artifacts from an event(s)

National Geographic Science provides books and writing opportunities for children that reflect these purposes and include these features. More important, *National Geographic Science* features topics, language, and graphics likely to be engaging to children.

Where?

You can work informational text into many places in your classrooms and curricula. I recommend including informational text in classroom libraries. Here, children can choose informational text for independent reading and as resources for writing. Displaying information books and giving book talks about some of your favorite informational texts is likely to stimulate interest in selecting these books for independent reading.

National Geographic Science includes a number of books likely to be popular choices for independent reading and re-reading. For example, the book *Watch Out!* by Christopher Siegel

features deep sea creatures as they lure and then eat their prey. The fascinating photographs feature creatures most people have never seen. The book *A Coyote in the City* by Barbara Wood tells the true story of a coyote that walked into a sandwich shop in downtown Chicago! Children experience an engaging story, with photographs from the event, while at the same time having an opportunity to deepen their understanding of animal habitats.

I also recommend including informational text on classroom walls. The walls of your classroom are like valuable billboard space – you can use them to “advertise” informational text and content. In *National Geographic Science*, Big Idea Cards and a number of student writing activities can provide worthwhile material for your classroom walls.

Finally I recommend including informational text in your classroom activities. If you read aloud, some of your read-alouds should be informational text. If you have children write every day, the writing on some days should be informational text. *National Geographic Science* is designed to provide considerable informational reading and writing opportunities that can support your literacy as well as your science curriculum.

How?

Teaching young children to read and write informational text is as challenging as it is important. Following are five essential elements of informational reading and writing instruction.

Rich Content Informational reading and writing skills are best developed by using texts that contain rich content that is new to children. Sometimes I see information books for children that feature content children are likely to already know. These books do not work well for informational reading and writing instruction. In order for children to develop their ability to learn from text, there has to be something in the text for children to learn. One of the reasons I am enthusiastic about teaching reading and writing through *National Geographic Science* texts is that there is a great deal of rich content not likely to be already known to children.

Texts with rich content also serve to build children’s background knowledge, which can help them when reading later texts (Wilson & Anderson, 1986). So often the children I see struggling with informational reading in later schooling simply don’t have the broad and deep store of knowledge

about the natural and social world required to understand what they are reading. *National Geographic Science* is designed to build that knowledge base to support later reading.

Important Vocabulary By the later elementary grades, vocabulary knowledge is an excellent predictor of reading comprehension (e.g., Anderson & Freebody, 1981; Wagner, Muse, & Tannenbaum, 2007). Unfortunately, many books designed for school reading instruction contain limited vocabulary, and some science texts for young children even promote misconceptions by using less accurate words (e.g., *sleep* for *dormant*). *National Geographic Science* uses key vocabulary for each topic and provides children with plenty of support for learning new words — definitions, repeated uses in multiple contexts, illustrative graphics, and opportunities to use the words in discussion and inquiry activities.

One of the things I am most proud of in *National Geographic Science* is that the program is designed to teach all children the key vocabulary of each unit, regardless of their reading level. This is critical because otherwise we are placing children with lower reading levels at a further disadvantage by denying them opportunities to learn important vocabulary needed for understanding content in present and future reading.

Strategy Instruction Teaching comprehension strategies improves reading comprehension even in primary grade children (e.g., Pearson & Duke, 2002; Roberts & Duke, in press; Stahl, 2004). The kindergarten units of *National Geographic Science* teach children to *preview* and *predict* and to *monitor* and *fix up*. In later grades, students are also taught to *make inferences* and *sum up*. The teacher's edition is designed so teachers who are already teaching these strategies can use the materials to reinforce the strategies, and teachers who are new to teaching these strategies have important information they need to get started. *National Geographic Science* follows a five-step model for teaching comprehension strategies (Duke & Pearson, 2002). The program includes books specifically designed for reading aloud, for guided reading, and for independent reading, providing material appropriate for each of these five steps.

Discussion Opportunities Occasions to talk about text can also improve children's reading comprehension (Murphy, Wilkinson, Soter, Hennessey, & Alexander, in press) as well as their science learning. Indeed, teachers who ask more higher order questions beginning early in schooling have students

who show stronger growth in reading comprehension (Taylor, Pearson, Clark, & Walpole, 2000).

National Geographic Science includes higher order, open-ended questions during reading as well as in inquiry. In addition, each unit includes a sharing experience called "Turn and Talk." During this time, children who read different books for guided and independent reading (for example, students who read about ocean habitats may talk with students who read about desert habitats) get together to talk about what they learned. In the Habitats unit, students are instructed as follows: "Compare the habitats in your books. How are they different? How are they alike?" Because children in different groups have not read one another's books, these are authentic opportunities for discussion, and allow all children, even those in the lowest group, to share their expertise on a particular topic.

Authentic Writing Young children need opportunities to write as well as to read and discuss informational text. In *National Geographic Science*, children have opportunities to write in their science notebooks and through writing projects suggested for each unit. Writing projects are launched by reading the unit's Write About book. These books connect to the unit's science content and are specifically designed to exemplify a target genre (expository, persuasive, procedural, or nonfiction narrative) and to demonstrate many elements of authors'/writers' craft in that genre, such as use of an opening to engage the reader in expository text or use of compelling photographs to incite action in persuasive text.

After reading these mentor texts, children have the opportunity to write their own texts in these genres. For example, after reading the book *How To Make a Wind Vane* by Kathryn Kuhn in the weather unit, one writing project option is to have students write their own procedural texts about how to make other weather tools (ideas are provided). After reading the book *Wild Animals in the City* by Gerard Mahoney, one option provided is to have students create a book about wild animals that live in their area and to give a copy to a local nature center.

One of the important things to notice about these writing projects is that they are authentic. That is, students are writing text similar to text people read and write outside of school. Students are writing for the same purposes as people who write these kinds of texts outside of school (Duke, Purcell-Gates, Hall,

& Tower, 2006/2007). As such, many of these projects have outside audiences, such as other classes within the school, organizations relevant to the writing content, and students' friends and family members. For example, in the *Life Cycles* unit, one writing project option is to have students decorate paper grocery bags for a local grocery store with persuasive messages encouraging people to plant trees (after reading the book *We Need More Trees* by Natalie Rompella). A recent study found that second- and third-graders whose teachers provided more authentic reading and writing opportunities in science showed stronger growth in reading comprehension and writing (Purcell-Gates, Duke, & Martineau, 2007).

Summary

In summary, informational text is appropriate even for young children, and there are many reasons to include it in elementary school curricula. There are several important kinds of informational text with specific purposes and features. You can incorporate these texts into classroom libraries, display them on classroom walls, and include them in classroom activities. In so doing, it is important to emphasize rich content, vocabulary, strategy instruction, discussion opportunities, and authentic writing. *National Geographic Science* provides many opportunities for enriching children's understanding and appreciation of informational text.



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Bibliography

- Anderson, R. C., & Freebody, P. (1981). Vocabulary knowledge. In J. T. Guthrie (Ed.), *Comprehension and teaching: Research reviews* (pp. 77–117). Newark, DE: International Reading Association.
- Duke, N. K., & Kays, J. (1998). "Can I say 'Once upon a time'?: Kindergarten children developing knowledge of information book language. *Early Childhood Research Quarterly*, 13, 295–318.
- Duke, N. K., Martineau, J. A., Frank, K. A., & Bennett-Armistead, V. S. (2008). The impact of including more informational text in first grade classrooms. Unpublished manuscript, Michigan State University.
- Duke, N. K., Purcell-Gates, V., Hall, L. A., & Tower, C. (2006/2007). Authentic literacy activities for developing comprehension and writing. *The Reading Teacher*, 60, 344–355.
- Duke, N. K., & Tower, C. (2004). Nonfiction texts for young readers. In J. Hoffman & D. Schallert (Eds.), *The texts in elementary classrooms* (pp. 125–144). Mahwah, NJ: Erlbaum.
- National Assessment Governing Board. (2007). *Reading framework for the 2009 National Assessment of Educational Progress*. Washington, DC: American Institutes for Research.
- Murphy, P. K., Wilkinson, I. A. G., Soter, A. O., Hennessey, M. N., & Alexander, J. F. (in press). Examining the effects of classroom discussion on students' high-level comprehension of text: A meta-analysis. *Journal of Educational Psychology*.
- Pearson, P. D., & Duke, N. K. (2002). Comprehension instruction in the primary grades. In C. C. Block & M. Pressley (Eds.), *Comprehension Instruction: Research-Based Best Practices* (pp. 247–258). New York: Guilford Press.
- Roberts, K., & Duke, N. K. (in press). Comprehension in the primary grades: A review of the research. In K. Ganske and D. Fisher (Eds.), *A comprehensive look at comprehension*. New York: Guilford.
- Stahl, K. A. D. (2004). Proof, practice, and promise: Comprehension strategy instruction the primary grades. *The Reading Teacher*, 57, 598–610.
- Taylor, B. M., Pearson, P. D., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low-income schools. *The Elementary School Journal*, 101, 121–165.
- Wagner, R. K., Muse, A. E., & Tannenbaum, K. R. (2007). Promising avenues for better understanding: Implications of vocabulary development for reading comprehension. In R. K. Wagner, A. E. Muse & K. R. Tannenbaum (Eds.), *Vocabulary acquisition: Implications for reading comprehension*. New York: Guilford.
- Wilson, P. T., & Anderson, R. C. (1986). What they don't know will hurt them: the role of prior knowledge in comprehension. In J. Oransano (Ed.), *Reading comprehension from research to practice* (pp. 31–48). Hillsdale, NJ: Lawrence Erlbaum.