

Resource Reviews

Beyond the Science Kit, edited by Wendy Saul and Jeanne Reardon, is a collection of articles by classroom teachers about their own experiences with using kits and other hands-on materials. The goal of the book is not to argue against the use of kits, but to suggest how they can be adapted to the needs of individual classes and children.

These chapters come directly from classroom experiences of skilled teachers, complete with examples of student work and classroom dialogue. Reardon reminds us, "Our best teaching will come from listening to and watching the children with their hands in science."

Beyond the Science Kit (\$24.00 plus \$4.00 shipping & handling for first book, \$1 for each additional book) is available from Heinemann.

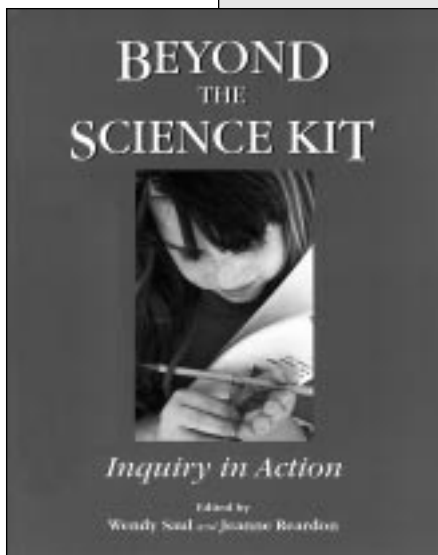
Inquiry at the Window, by Phyllis Whitin and David J. Whitin, is largely the story of one fourth grade classroom where children's sense of wonder is both developed and supported. The window of this classroom is where a great deal of observation of birds takes place and this becomes the topic of the students' long term inquiry. The Whitins use examples from the classroom to elaborate on inquiry learning in very helpful and clear ways. The book includes children's work, classroom dialogues and explanations of links to many members of the local community.

Inquiry at the Window (\$21.00). Available from Heinemann.

Inquiry: Thoughts, Views, and Strategies for the K-5 Classroom, is part of the *Foundations* series now being published by the National Science Foundation. This book contains thirteen diverse articles, including several by authors on the staff of the Exploratorium. Also featured is an excellent chapter by Hubert Dyasi, who has worked extensively with New York City schools, and two useful chapters on assessment, one by Wynne Harlen and another by George Hein and Sabra Lee.

Inquiry: Thoughts, Views, and Strategies for the K-5 Classroom, is free of charge. An electronic version is available on the NSF webpage, www.nsf.gov under "Public/Media Information", document NSF99-148. Or write Div. of Elementary, Secondary & Informal Education, 4201 Wilson Blvd., Rm#885, Arlington, VA 22230. Call (703)306-1620

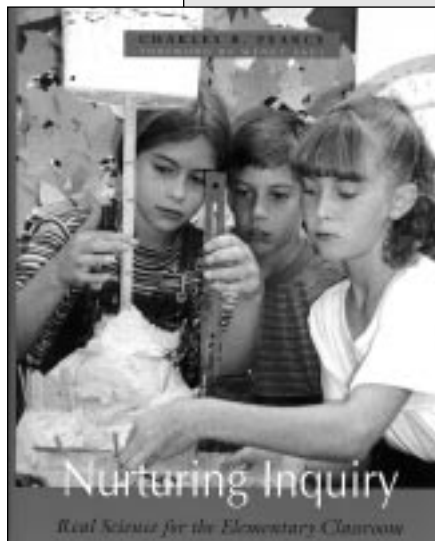
Collaborative Inquiry in Science, Math and Technology, by Dennis Adams and Mary Hamm, argues that scientific inquiry and mathematical problem solving skills can best be encouraged in an atmosphere of cooperative learning. Field tested activities and assessment strategies appear throughout the book. They illustrate specific points, but



Nurturing Inquiry, Real Science for the Elementary Classroom, by Charles R. Pierce,

tells the story of the author's classroom in Maryland. But in doing so, Pierce examines the theoretical underpinnings of his own teaching. He writes about children's learning styles and the challenges of encouraging inquiry among students who have had little opportunity for it in the past. The book includes many specific ideas for projects, investigations and communicating ideas.

Nurturing Inquiry, Real Science for the Elementary Classroom (\$21.00). Available from Heinemann.



they are also well explained and usable in classrooms. Examples include investigations of light, sound, patterns and the use of manipulatives to promote inquiry in math.

Collaborative Inquiry in Science, Math and Technology (\$19.50). Available from Heinemann.

Talking Their Way Into Science, by Karen Gallas has been reviewed previously in *Connect*. We list it here because it is such a remarkable approach to supporting inquiry with young children. Children raise central issues in “science talks” which form the basis for longer investigations. The book reports on the technique in Gallas’s own classroom and beyond.

Talking Their Way Into Science (\$16.95 plus \$3.50 shipping for first book and .75 for each additional book) is available from Teachers College Press, PO Box 20, Williston, VT 05495-0020. Call 800-575-6566, fax 802-864-7626.

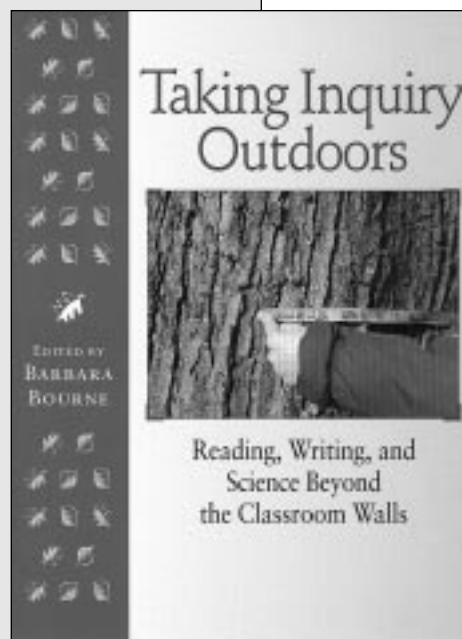
The Science Detective, opens possibilities for inquiry through problems posed in a fictional video about an astronaut searching for extra-terrestrial life. Developed by the SETI Institute, the book and video represent a high level of confidence in the existence of life on other planets. To encourage inquiry, you would have to adapt some of the activities in the teacher’s guide. The material is listed as appropriate for grades 3 and 4. Some of the activities about the solar system could easily be used with older students.

The Science Detective (\$54.00 includes book, video and full-color poster) is available from Teacher Ideas Press, PO Box 6633, Englewood, CO 80155-6633. Call 800-237-6124, fax 303-220-8843. Web site address is www.lu.com/tip/

Taking Inquiry Outdoors, edited by Barbara Bourne, has the subtitle, “Reading, Writing and Science Beyond the Classroom Walls.” Like *Beyond the Science Kit*, reviewed here, it comes from the work of a group of teachers connected with the University of Maryland. This book focuses on

science as motivation for reading, research and writing and on ways that conventional subject matter can be integrated to make a more useful whole for students. Chapter authors include eight classroom teachers from preK to eighth grade.

Taking Inquiry Outdoors (\$17.00 plus \$3.50 shipping) is available from Stenhouse Publishers, PO Box 1929, Columbus, OH 43216-1929. Call 800-988-9812, fax 614-487-2272. Web site: www.stenhouse.com.



For any of the titles published by Heinemann, contact them directly at: PO Box 5007, Westport, CT 06881. Call 800-793-2154, fax 800-847-0938.

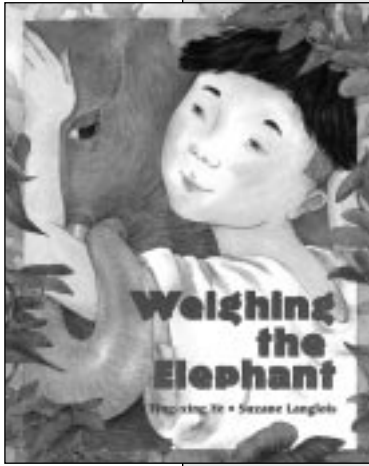
They offer 10% discounts on web orders through their site: www.heinemann.com

These Resource Reviews focus on books which can help with discussion and planning of inquiry investigations, but inquiry in the classroom demands good materials and equipment. Synergy Learning is developing a basic materials list for science and math inquiry. To receive a copy of the draft, or to submit ideas, please call us at 800-769-6199 or e-mail: inquiry@synergylearning.org. The annotated list will be published in *Connect* in the fall of 2000.



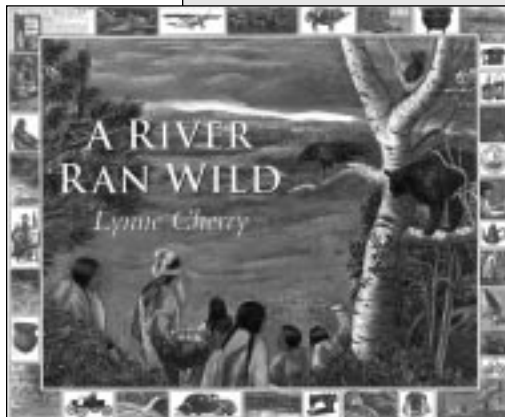
Literature Links

These examples of children's literature have been selected because they raise opportunities for inquiry of one sort or another. But you may disagree. Any high-quality children's book might raise intriguing questions for a specific child. On the other hand, our choices here might not captivate a certain reader or listener. What do you recommend? Let us know and we will publish your idea or list in a coming issue.



Weighing the Elephant, by Tingxing Ye (Annick Press, 1998), tells the story of a boy and young elephant. The Emperor will take the elephant away unless the villagers can tell its weight. They have two days. The boy, Hei-dou, devises a plan and it works, to the amazement of the villagers. Colorful and detailed illustrations by Suzane Langlois add to the story and allow you to raise other questions about the community, the elephant and the emperor.

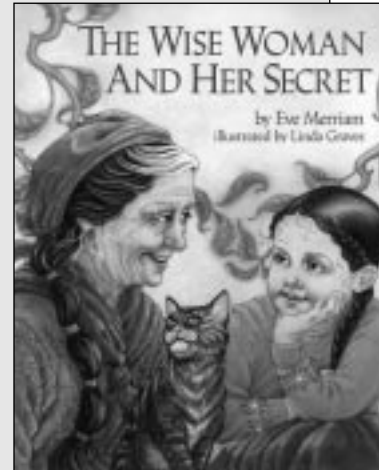
June 29, 1999, by David Weisner (Clarion, 1995), tells of strange things happening all over the US shortly after Holly Evans launches vegetable seeds in flats into the air, lifted by weather balloons. Her science project may be the explanation for such things as, "Artichokes Advance on Anchorage" and other headlines. The book explains one approach to the scientific method while it is also a work of science fiction that has been enjoyed by teachers and students.



A River Ran Wild, by Lynne Cherry (Harcourt Brace, 1992), could be used in relation to a specific study of watersheds. Or, it could raise questions about human behavior, first about ignoring a valuable resource and then working to restore it. Specifically, the book

is about the Nashua River in eastern Massachusetts, but the story could apply to many rivers and bio-regions. Wonderful illustrations, large and small, allow for many more questions by readers.

The Wise Woman and Her Secret, by Eve Merriam (Simon & Schuster, 1991), tells the tale of a woman who will not reveal the secret of her wisdom. Finally, a young girl discovers it, yet she is amazed, "How can I have found it?" Because, the old woman replies, "The secret of wisdom is to be curious . . . to keep on wandering and wondering." This is an exceptional book that also includes the criticism that the old woman faces because she believes so firmly that people must find the secret on their own. Illustrations by Linda Graves add to the story and its characters.



Who Really Killed Cock Robin? by Jean Craighead George (Dutton, 1971), is a young adult book with an exciting environmental storyline. Two eighth-graders have set out to discover why this particular robin died. After much investigation, they find the cause in a story that is believable, interesting and informative. Although its neighborly, small town environment would not be familiar to all readers, this scientific detective story remains fresh even after thirty years.

The Mystery of King Karfu, by Doug Cushman (Harper Collins, 1996), uses both story and art to tell a story and provide clues to the mystery. Readers can discover more than the text actually tells. The entire book pretends to be the notebook of the famous detective, Seymour Sleuth, with his notes, pasted-in clues and scraps of information. The text and illustrations would be of interest to many primary children, but older elementary students can raise interesting questions from careful study of the book.