Workshop 1.
What Is Inquiry and Why Do It?

This introductory workshop presents an overview of why inquiry is such a powerful approach to teaching and learning science—how it enables you to assess and meet the needs of a wide range of learners, how it taps children's natural curiosity, and how it deepens their understanding of science.
Workshop 1  10  Learning Science Through Inquiry

On-Site Activities and Timeline

Getting Ready

Introductions (10 minutes)
Begin the course by introducing yourselves to one another. Explain briefly why you are participating in this course, and what experiences you have had with science inquiry.

Focus for Viewing (20 minutes)
Today’s program explores what science inquiry is and why it is important. Organize in pairs to discuss what “inquiry” means to you. Each person should create a two-column worksheet on a piece of paper. Make a list of what you would expect to see happening in an inquiry classroom. In the first column, list what the teacher would be doing and in the second column, list what students would be doing.

After 10 minutes, reconvene as a whole group and share what you think inquiry looks like. Use a flip chart to record your ideas.

As you watch the program, look for the characteristics you have listed on your sheets, and add to your columns as you observe something new about the inquiry approach.

Watch the Workshop Video

Video Pause Point
Discuss the characteristics of inquiry that you noticed in Virginia Lockwood’s classroom.

• What is the science content the students are learning?
• What did you observe about the interactions between the teachers and the students?
• What did you observe about the interactions among the students?

Going Further

As a group, discuss your reactions to the program. Use the flip chart that you started before the program and add other things you observed in the video clips to your list of what the teacher would be doing and what the student would be doing in an inquiry classroom.

Discuss the teaching strategies that would be new for you and what support or resources you would need to implement them.
For Next Time

Homework Assignment

This week, start a journal for this course, and keep a log of what happens in your science classroom. Reflect on what you and your students do, and note any inquiry learning taking place. Here are some guiding questions to help you focus on your classroom activity:

- Are students given opportunities to explore materials?
- What questions did you ask?
- Do students raise questions?
- What questions did students ask?
- Are students working with materials?
- What do you do to facilitate student thinking?

Reading Assignment

You will find the following assignment in the Appendix of this guide (pages A-14 through A-18), or you can find it at http://www.nsf.gov/pubs/2000/nsf99148/ch_2.htm.

- What Children Gain by Learning Through Inquiry, by Hubert Dyasi

The following assignment can also be found in the Appendix (pages A-19 through A-24), or online at http://www.nsf.gov/pubs/2000/nsf99148/intro.htm.

- An Introduction to Inquiry

Handouts

You will find the following handout in the Appendix of this guide (page A-25):

- Student Survey, by Charles R. Pearce

Find Out More

Go to www.learner.org/channel/workshops/inquiry and click on Find Out More for a list of monographs, essays, articles, and books that further explore the topics from this workshop.
For Next Time

Ongoing Assignment (Optional)

For those of you who would like to delve more deeply into the inquiry process, we encourage you to try the following exercise, and to share your successes and challenges with a colleague or an online buddy. We especially urge participants viewing the series at a group site to implement these open-inquiry activities, so you can discuss the experiences at your weekly gatherings.

Go to www.learner.org/channel/workshops/inquiry, and click on Implementing Inquiry. There you will find the Science Learning Plan Guidelines, which provide a framework for implementing a full open-inquiry investigation with your students; a description of Virginia Lockwood’s “Folder Walk,” which is featured in the video program, as well as a lesson plan for Chris Collier’s Decomposition Unit and other dynamic activities to help you implement inquiry in your classroom.