

Workshop 4.

Focus the Inquiry: Designing the Exploration

Students' open exploration leads to a range of interests and questions that lead in turn to deeper investigation. This program looks at the design process—how you can guide students to plan and begin their investigations.

On-Site Activities and Timeline

Getting Ready

30 minutes

Review Homework (20 minutes)

In groups of two or three, share your KWL charts. What did you learn from your KWL charts about your students' knowledge? How might you use this in the future?

Focus for Viewing (10 minutes)

In this program, you will see how to focus the inquiry investigation by selecting one or more student questions from a launching activity in order to design an investigation. In your small groups, select one or two of the questions raised from your KWL chart by the students that you think your class could investigate further. Reconvene to share these questions and to discuss why you think they are the best to investigate.

Watch the Workshop Video

60 minutes

Video Pause Point

What are the critical elements of design in the investigations?

Going Further

30 minutes

Discussion (10 minutes)

Share your reactions to the program.

Discussion (20 minutes)

Arrange yourselves in groups based on grade level. First, identify the skills and knowledge students need to design and conduct investigations. Make a list of the skills your students require, such as fair testing, recording data, manipulating materials, sharing information, working in groups, etc. Discuss how you could help students develop one or two of these skills.

For Next Time

Homework Assignment

Keep up your journal. During the week, look at the learning goals that you are currently focusing on in your science program. Take one lesson or event from your program and plan how you might change it to give students more opportunity to do inquiry. Write a description of that lesson plan, and bring it to your next group discussion.

Reading Assignment

You will find the following assignment in the Appendix of this guide (pages A-56 through A-64), or you can find it at <http://www.exploratorium.edu/IFI/resources/workshops/teachingforconcept.html>.

- **Teaching for Conceptual Change: Confronting Children's Experience**, by Bruce Watson and Richard Kopniecek

Handouts

You will find the following handouts in the Appendix of this guide:

- **Question Search**, by Karen Pearce (page A-65)
- **More Testable Questions**, by Charles R. Pearce (page A-66)
- **Science and Questions**, by Charles R. Pearce (page A-67)

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.

Notes
