Using *Atlas of Science Literacy* in Informal Science Education Settings

WORKSHOP AGENDA

DAY ONE

8:30 – 9:00 Welcome and Getting Started
Participants and presenters introduce themselves. They discuss relationship between formal and informal science learning experiences and their expectations for the workshop.

9:00 –10:00 The Challenge for Science Literacy
Participants explore the current state of students' understanding of important ideas in science, mathematics, and technology and discuss the role of informal science education in promoting science literacy for all. Participants discuss challenges they face in their institutions and programs, especially when working with school-based audiences.

10:00 –10:30 Overview of Project 2061 & This Workshop
This is a brief discussion of the history of Project 2061 and the relevance of the *Atlas of Science Literacy* and other tools to the work of informal science education.

10:30 – 12:00 *Atlas* Maps as Tools for Understanding Science Learning
As an introduction to the *Atlas of Science Literacy*, participants develop their own maps, learn how to clarify science ideas on a map, and begin to explore the *Atlas* and its features.

12:00 – 1:00 LUNCH

1:00 – 2:30 Using *Atlas* Maps in Informal Science Education Settings
Participants will learn more about the learning progressions displayed on the maps; the conceptual, cognitive, and thematic connections among ideas that are implied by the arrows; and how this information can be applied to informal science learning experiences of all kinds.

2:30 – 3:30 Previewing a Museum Exhibit for Study
Participants visit an exhibit that they will analyze on Day Two using a procedure developed by Project 2061. The procedure will be used to evaluate how well the learning experience provided by the exhibit addresses science ideas that are included in national and state standards and how effective the exhibit is likely to be in making those ideas clear to school-based audiences.

DAY TWO

8:30 – 9:00 Reflections & Review
A discussion of Day One highlights and a review of *Atlas* features prepare participants for Day Two activities.

9:00 – 10:00 Studying an Exhibit Topic
Focusing on a specific exhibit, participants use Project 2061's procedure for clarifying the science ideas that appear to be the topic of the exhibit. Working in small groups, they study the exhibit to evaluate the extent to which those ideas are addressed.

10:00 – 10:15 BREAK

10:15 – 11:00 Exhibit Topic Study Discussion
Participants report on and discuss their findings about the science content of the exhibit they studied.

11:00 – 12:00 Analyzing Learning Experiences
Participants are introduced to a set of criteria for analyzing informal science learning experiences that can help them judge how well the science content is likely to be conveyed to their targeted school-based audiences.

12:00 – 1:00 LUNCH

1:00 – 3:30 Practicing the Analysis Procedure
Focusing on the exhibit they visited on Day One, participants practice applying the criteria and discuss what they have learned about the exhibit and about the analysis procedure itself.

DAY THREE

8:30 – 9:30 Discussion/Issues/Review
Group will briefly discuss any questions or issues left over from Day Two and review plans for Day Three.

9:30 – 10:45 Project Work Time – Exhibit Topic Study
After choosing another exhibit on their own, participants work in small groups to clarify the science ideas the exhibit is intended to address and consider the extent to which the exhibit actually does present those ideas.

10:45 – 11:00 Q&A

11:00 – 12:00 Project Work Time- Analyzing Learning Experiences
Small groups continue their analysis of an exhibit by applying the Project 2061 criteria to evaluate how successful the exhibit is in conveying the relevant science ideas to a specific school-based audience.

12:00 – 1:00 LUNCH

1:00 – 3:00 Presentation and Discussion of Findings
Small groups report out and discuss what they have learned about the exhibits they have studied and consider general implications for the design, implementation, and evaluation of informal science learning experiences.

3:00 – 3:30 Final Reflection/Feedback
Participants will reflect one last time on the workshop and share any last comments with the group.