Effective K-12 Outreach Strategies

Presenters:

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Assisted by:

2007-2008 Albert Einstein Distinguished Educator Fellows
Session Objectives:

• Identify characteristics of quality K-12 outreach in both formal and informal settings.

• Develop an action plan for the development of successful K-12 outreach.

*If you don’t know where you are going, you’ll end up somewhere else.*

Yogi Berra
Who are Einstein Fellows?

A select group of elementary and secondary STEM educators with demonstrated excellence in teaching who are invited to spend a school year in Washington DC to provide practical insight in establishing and operating educational programs.
Session Overview

• Why develop K-12 outreach activities & materials?
• Formal vs. Informal K-12 Outreach
• Examples of K-12 Outreach
• Panel Discussion: Einstein Fellows
• Designing K-12 formal/informal activities & materials
Why develop K-12 outreach activities & materials?

“A new generation of bright, well-trained scientists and engineers will transform our future only if we begin in the 6th grade to significantly enlarge the pipeline and prepare students to engage in advanced coursework in mathematics and science.”

“One key to improving student success in science and mathematics is to increase interest in those subjects.”
Why develop K-12 outreach activities & materials?

America Competes Act

- encourage all elementary and middle schools to observe a Science, Technology, Engineering, and Mathematics Day twice in every school year;
- initiate a program to encourage federal employees with scientific, technological, engineering, or mathematical skills to interact with school children on such Days; and
- promote involvement in such Days by appropriate private sector and institution of higher education employees.
Why develop K-12 outreach activities & materials?

Promote your Program

Promote your Research

Promote Yourself!
Formal vs. Informal Education (Learning)

Formal Education is:

- Classroom based and provided by trained instructors
- Instructors possess a certain level of training in content, management, pedagogy
- Instruction is related to educational standards
Informal Education is:

• Highly personalized based on the needs, interests, and past experiences of the learner

• Voluntary, self-directed and often mediated within a social context

• Provides an experiential base and motivation for further activity and subsequent learning
Examples - Formal & Informal K-12 Outreach

Step 1:
Consider the following:

• How is each example a portrayal of successful or unsuccessful outreach?

• What characteristics make each one successful?
Examples - Formal & Informal K-12 Outreach

Step 2:

• As a table group identify, and record on paper, what you believe are characteristics of a successful formal/informal K-12 outreach
Einstein Fellows Panel Discussion:
Educators’ Perspective: K-12 Formal/Informal Outreach

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