



WELCOME TO PISEC

Philadelphia/Camden Informal
Science Education Collaborative

PISEC

- *Who* 4 Museums, 8-12 CBOs
- *When* 1993-present
- *What* Research and programs
- *Why* Engaging underserved families



5 PISEC Projects and A Conference

- Family Science Learning Project
- Community Connections
- FEST
- CASE
- BRIDGES Conference
- CLUES



Family Science Learning Project

A research and development project
to find out how families learn science in
informal settings

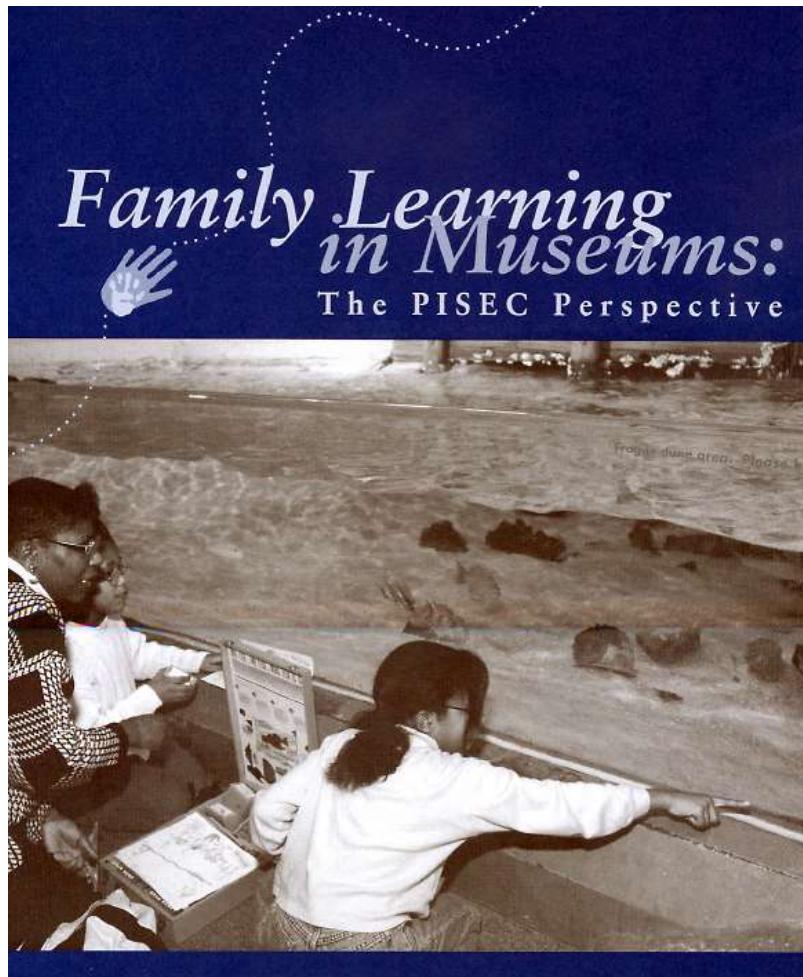


7 Characteristics of Family-Friendly Exhibits

A new model for exhibit design

- **Multi-sided** — family can cluster around exhibit
- **Multi-user** — interaction allows for several sets of hands
- **Accessible** — comfortably used by children and adults
- **Multi-outcome** —sufficiently complex to foster group discussion
- **Multi-modal** — appeals to different learning styles and levels of knowledge
- **Readable** — text is arranged in easily understood chunks
- **Relevant** —cognitive links to existing knowledge and experience

Project publication is now used widely in designing for groups



Community Connections

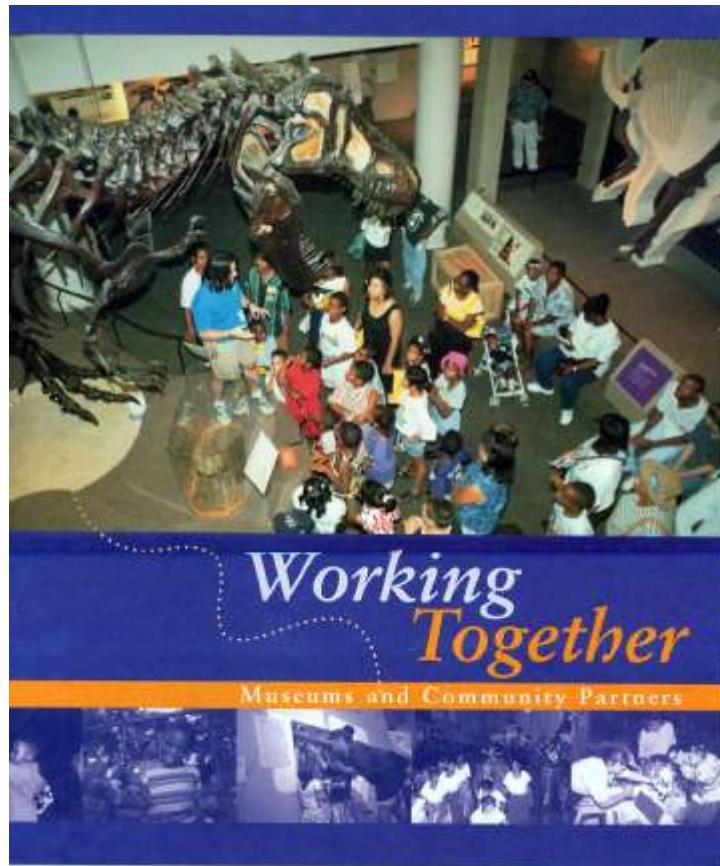
- An outreach project funded by Pew
- To diversify museum audiences and enhance family science learning
- 8 Community Partners serving African-American and Latino families
- Reached 17,000 people



Program Components

- Introductions at community sites to the four museums
- Welcome sessions at the museums
- Day long collaborative events at each museum
- “Program credits”—for each CBO to purchase existing museum programs

Project handbook is widely distributed in the science museum community



Families Exploring Science Together (FEST)



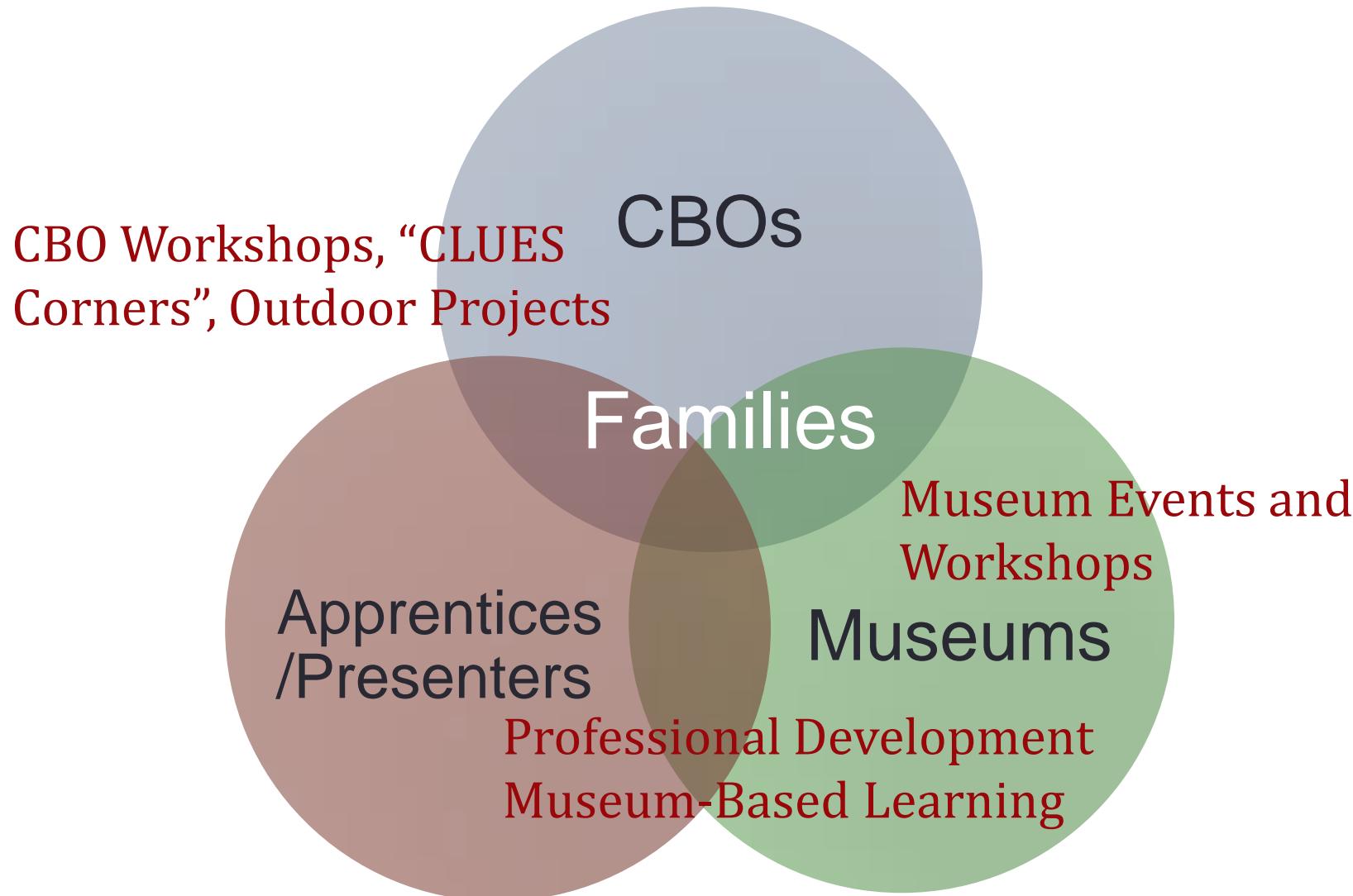
- To increase parental involvement in children's science education
- 11 community partners serving Latino, African-American, and Asian families
- Reached 12,000 participants
- Funded by NSF, Wm Penn Foundation, Fund for NJ, Hasbro Children's Foundation, The Hearst Foundations, Inc.

Community Ambassadors for Science Exploration (CASE)

- Ambassadors from the community trained at museums to give workshops at the CBOs
- 142 Ambassadors led over 350 family workshops at community sites
- Also workshops and events at the Museums to strengthen connection b/w museums and neighborhoods



Currently: Communities of Learning for Urban Environments and Science (CLUES)



Apprentices





Workshops at CBOs





Workshops at Museums



Evidence of Impact

- Reflections from similar programs
- Case Studies
- Ongoing Evaluation

How we
know
what
works



BRIDGES
June 20-22, 2008

Results of BRIDGES Conference

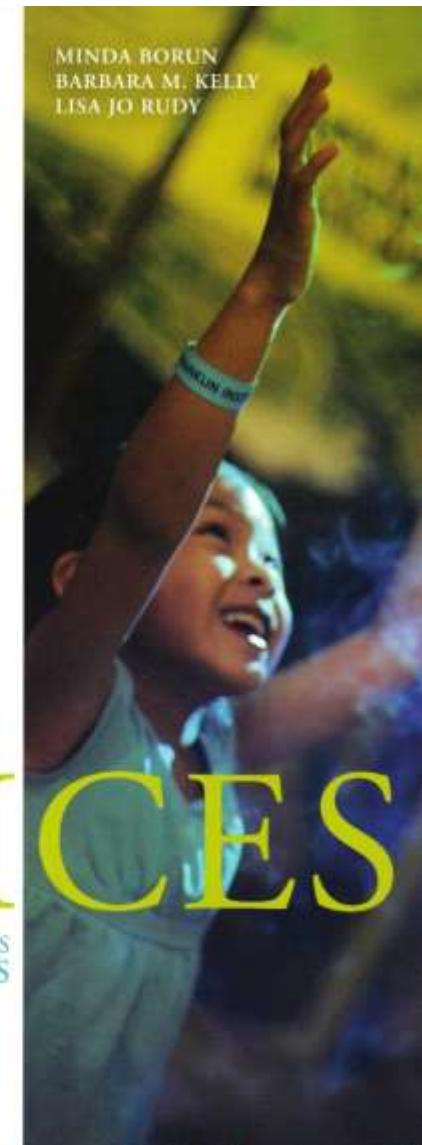


BRIDGES--Takeaway Messages

- Choose collaborators with care.
- Communicate well and often with partners.
- Co-design exhibits and programs that are relevant and interesting to your constituency.
- Ensure ongoing funding; don't drop the ball after one or two “inclusive” programs, exhibits or hires.

Case Studies

- 13 stories from highly involved participants
- A look back over 18 years of PISEC programs



GOODMAN RESEARCH GROUP, INC.
Program Evaluation • Consultation • Market Research

***Communities of
Learning for Urban
Environments and
Science (CLUES)
Program
Year 3 Evaluation
Report***

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Ongoing Evaluation

- Families say they attend CLUES events to learn about science, do something as a family, and have fun.
- Apprentices and Presenters had gains in environmental science content knowledge and ISE skills. Almost two-thirds say they *probably* or *definitely* will continue in ISE.
- Presenters agreed that CLUES participation increased their understanding of and confidence in their ability to succeed in ISE and led to a fuller exploration of their career goals.
- CBO liaisons saw positive influences of CLUES on families, including improving their attitudes toward science and increasing their environmental engagement.