Nurturing ISE Talent From Within Your Community

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Nurturing ISE Talent From Within Your Community

Adults were recruited from the community to develop and deliver informal science experiences to urban families.

Session Objectives:
• Give a brief overview of the project
• Meet three participants from the project
• Share our experiences and offer insights
  • Recruitment
  • Professional development
  • Communication within the community
Who
Franklin Institute
Academy of Natural Sciences of Drexel University
Center for Aquatic Sciences at Adventure Aquarium
Philadelphia Zoo
And
8 – 12 Community-Based Organizations (CBOs)

When
1993-present

Who
Engaging Underserved Families

How
Programs and Research
• Create a new model of family learning and professional development for underserved families.

• Take a radically different approach by building capacity for STEM education within community-based organizations (CBOs).
• Enlisted Apprentices from CBO partners;
• Developed a professional development program to train Apprentices as informal science educators;
• Developed and delivered environmental workshops at CBO partner sites;
• Supported ongoing collaborations among Apprentices, families, CBOs and museums.
Apprentices in the Museum
Working with the CBOs
Museum Events
CBO Workshops
More CBO Workshops
CLUES Statistics

• 4 year program
• 4 museums and 12 community-based organizations
• 3 cohorts of Apprentices, 8 – 10 each cohort
• 16,225 documented visits:
  • 327 CBO workshops
  • 33 museum workshops
  • 19 large museum events
K. Sean Stallworth
Coordinator Outside In
The Academy of Natural Sciences of Drexel University

• I was an HVAC tech, but always had a love for science.
• I’m now an exhibit coordinator at the Academy of Natural Sciences of Drexel University.
• I joined CLUES for the science teaching experience.
• I have a career doing what I love which is educating people and I’m also a familiar face for some in an unfamiliar career.
• I’ll be telling you more about how we recruited the Apprentices.
James Sannino
Digital Media Developer
The Franklin Institute

- Started in the NJ State Aquarium Youth Program (CAUSE) in 2003, then attended MIT Ocean Engineering 2007.
- I’m a Digital Media Developer at The Franklin Institute since 2013.
- Joined CLUES to do good.
- I enjoyed the diversity of people and unique experiences & challenges.
- I’ll be telling you about the professional development that we went through to become Apprentices.
Desi Broadhurst
Education Department Administrative Assistant
The Academy of Natural Sciences of Drexel University

• I’m a parent from FACT Charter School, a CBO partner.
• I’m currently working at The Academy of Natural Sciences of Drexel University
• I joined the program out of curiosity.
• What I liked about CLUES was creating connections with people and developing the workshops.
• I will be telling you about the various methods we used to communicate with families in the community.
Topics for Discussion

Apprentice Recruitment

Professional Development

Communication
K. Sean Stallworth
Program Recruitment

Initial Plan

• Application and position description were created and approved by the museums and CBOs.

• Each CBO would select candidates that were affiliated with their CBO.

• Both CBO and museum would approve candidates and choose the Apprentices.
Program Recruitment

Challenges

• Some CBO’s had difficulty finding candidates; had to go beyond the CBO.
• Apprentices had varying levels of experience and skill sets, including formal education.
• Museums had to make a conscious effort to accept applicants who would not normally meet museum employment standards.

Results

• Retention Rate - 25 apprentice completed the program over 4 years, 3 did not complete the program
Cohort 1 - Year 1 & 2

Cohort 2 - Year 3

Cohort 3 - Year 4

CLUES Apprentices
# James Sannino

**Professional Development**

Skill Sets Needed:

<table>
<thead>
<tr>
<th>Museum Skills</th>
<th>Professional Skills</th>
<th>Personal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Museum education</td>
<td>Community leadership</td>
<td>Working in a flexible office environment</td>
</tr>
<tr>
<td>Environmental science</td>
<td>Public speaking</td>
<td>Dealing with wide variety of personalities</td>
</tr>
<tr>
<td>General science</td>
<td>Public education</td>
<td>Meeting work goals, deadlines</td>
</tr>
<tr>
<td>Education theory</td>
<td>Networking non-profit organizations</td>
<td>Paperwork</td>
</tr>
<tr>
<td>Curriculum writing and planning</td>
<td>Managing others</td>
<td>Being inspirational</td>
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<tr>
<td></td>
<td></td>
<td>Scope/ Failure</td>
</tr>
</tbody>
</table>
Adjusting To Different People

- Museum Staff
- CBO Staff
- Families
- Students / Children
- General Public
- Training Staff
- Evaluators
- Other Apprentices

Be able to explain your job!
Adjusting Along The Way

With each cohort, tactics were reassessed and modified:

- Museum time
- CBO time
- Professional development
- Workshops
Communications

• Museums usually reached out to families through the CBOs.
• Apprentices build communication bridge between Museum, CBO and families.
• Used media such as bulletin boards, flyers in multiple languages, email and website.
• Some difficulties in communications with families - language issues, trust and connection.
• Apprentices act as a visible person to solve some of the issues.
• Progression over 20 years.
Group Discussions

Short discussion of each topic
Quick report out
Recruiting adults from within the community

- Where do you find them?
- What skills do they need?
- What can you train?
- Where do they best fit?
- What are you offering them?
How would you train them?
What resources do you have within your museum?
What resources do you have outside your museum?
How would you incorporate them into your work environment when they are from the “outside”?
How do you take a “youth development” model and change it for adults?
Communication strategies to connect with families in the community

- How do you reach out in a multi-faceted way?
- What have you tried?
- What has worked for you?
- What has been the biggest challenge?
- How do you deal with language issues?
Questions?
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