4-H Science in Urban Communities
4-H Science in Urban Communities Promising Practices

PARTNERING WITH AFTERSCHOOL AND SUMMER PROGRAM PROVIDERS

Chad Ripberger
County 4-H Agent, CEDH
Rutgers University
TRENTON, NEW JERSEY
HOW WE DID IT

• 4-H professionals nominated by SPL and science liaisons
• Each self-identified strengths in content areas
• Provided description, promising practices, and challenges in each of top 5 content areas
• Compiled info for each content area
• Conference calls in each content area
• Writing and review
# The Contributors

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nate Arnett</td>
<td>The Ohio State University</td>
<td>Dayton, OH</td>
</tr>
<tr>
<td>Marianne Bird</td>
<td>University of California</td>
<td>Sacramento, CA</td>
</tr>
<tr>
<td>Jackie Davis-Manigaulte</td>
<td>Cornell University</td>
<td>New York City, NY</td>
</tr>
<tr>
<td><strong>Beth Rasa Edwards</strong></td>
<td><strong>University of Missouri</strong></td>
<td><strong>Kansas City, MO</strong></td>
</tr>
<tr>
<td>Richard Enfield</td>
<td>University of California</td>
<td>San Luis Obispo and Santa Barbara, CA</td>
</tr>
<tr>
<td>Dave Francis</td>
<td>Utah State University</td>
<td>Salt Lake City, UT</td>
</tr>
<tr>
<td>Janet Martin</td>
<td>Iowa State University</td>
<td>Iowa City, IA</td>
</tr>
<tr>
<td>Leon Moon</td>
<td>University of Missouri</td>
<td>Kansas City, MO</td>
</tr>
<tr>
<td>Ashley Mullens</td>
<td>Louisiana State University</td>
<td>Baton Rouge, LA</td>
</tr>
<tr>
<td>Name</td>
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<td>Location</td>
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<tr>
<td>Sheryl Nolen</td>
<td>Texas A&amp;M University</td>
<td>Houston, TX</td>
</tr>
<tr>
<td>Jim Nichnadowicz</td>
<td>Rutgers University</td>
<td>Elizabeth &amp; Plainfield, NJ</td>
</tr>
<tr>
<td>Bill Pabst</td>
<td>University of Missouri</td>
<td>Columbia, MO</td>
</tr>
<tr>
<td>Lucinda Randolph-Benjamin</td>
<td>Cornell University</td>
<td>New York City, NY</td>
</tr>
<tr>
<td>Chad Ripberger</td>
<td>Rutgers University</td>
<td>Trenton, NJ</td>
</tr>
<tr>
<td>Danielle Rudolph</td>
<td>Alabama A&amp;M University</td>
<td>Montgomery, AL</td>
</tr>
<tr>
<td>Jessica Russo</td>
<td>University of Minnesota</td>
<td>Twin Cities, MN</td>
</tr>
<tr>
<td>Steve Wagoner</td>
<td>University of Illinois</td>
<td>East St. Louis, IL</td>
</tr>
<tr>
<td>Philson Warner</td>
<td>Cornell University</td>
<td>New York City, NY</td>
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1. PROGRAM DESIGN
2. ENTREPRENEURIAL
3. PARTNER
4. BUILD CAPACITY
5. TELL THEIR STORY
SECTION 1: 4-H SCIENCE CORE PRINCIPLES

• 4-H Science Program Design – 4-H Science Checklist
• Inquiry Based Learning Approaches
• Providing Youth Authentic Opportunities to Practice and Share Science Abilities
• Training Others to Deliver Science Programs
Section 2: Partnerships

• Afterschool Providers
• Summer Program Providers
• City Government & City Parks and Recreation
• Universities & Campus-Based Scientists
• Science Centers & Museums
• State Level Practices to Advance Urban Programming
SECTION 3: STAFFING, RECOGNITION, MARKETING

- Content Rich Volunteers
- AmeriCorps Members
- Teenagers as Teachers
- Recognizing Youth & Showcasing Efforts
- Marketing & Branding 4-H Science in Urban Communities
Eighteen 4-H Youth Development professionals from across the country contributed to the development of this promising practices guide for 4-H Science in Urban Communities as part of a National 4-H initiative funded by the Noyce Foundation. The guide includes promising practices, case studies, and suggested resources in each of 15 content areas - all with a focus on expanding the quality and quantity of out-of-school science programming.
Partnersing with Afterschool Providers

Introduction

Partnersing with afterschool providers can leverage networks, resources, and opportunities to reach youth traditionally served in science programs. Building partnerships is a hallmark of successful afterschool programs, however, afterschool partnerships are not typically the expertise of science or program design in support of science, engineering, and technology learning experiences.

There are many opportunities to partner with afterschool programs in early childhood development and afterschool science programs. The goal of this chapter is to provide promising practices that will help develop and sustain successful 4-H Science afterschool programs in partnership with afterschool providers.

The introduction of this unit also provides some, initially, the science content. For more information about what constitutes a 4-H Science program, please visit the website of the 4-H Science Program Design.

There are two models for delivering 4-H Science, one that is focused on formal education and one that is focused on informal education. The model that is focused on formal education is more traditional in its approach, while the model that is focused on informal education is more flexible and adaptable to the needs of the community.

In the training content, the model for delivering 4-H Science, one that is focused on formal education and one that is focused on informal education. The training content is designed to provide a comprehensive overview of the 4-H Science program and to help afterschool providers develop successful afterschool science programs.

Promising Practices

The promising practices for partnering with afterschool providers are divided into four categories:

1. Comprehensive and Sustained Support
2. Developing and Evaluating Partnerships
3. Teaching and Learning Partnerships

The Promising Practices for Partnering with Afterschool Providers are reprinted from the 4-H Science Program Design. This chapter provides comprehensive and sustained support for developing and evaluating partnerships and for teaching and learning partnerships.
• Introduction
• 4-H Science Program Design – 4-H Science Checklist
• Providing Youth Authentic Opportunities to Practice & Share Science Abilities
• Training Others to Deliver Quality Science Programs
• **Partnering with Afterschool Providers**
• Staffing with Teenagers & Teens as Cross-age Teachers
Opportunity for 4-H

- Complementary Resources
- Evolution of Afterschool
- Goal for 4-H Science in OST – sequential PROGRAMMING leading to mastery of 4-H Science Abilities
- Direct Delivery vs. Training Collaborating Staff
- Fidelity of Implementation
- Site Readiness – Finding the Right Match
Jackson County 4-H Afterschool

PARTNERING WITH AFTERSCHOOL PROVIDERS CASE STUDY

Beth Rasa Edwards
4-H Youth Specialist
University of Missouri
KANSAS CITY, MISSOURI
Partnering with afterschool providers will provide opportunities to expand program efforts.

Promising Practices:

• Work as a Team
  – Strengths/Needs
  – Regular communication
**PARTNERING WITH AFTERSCHOOL PROVIDERS**

- “Customized Program” efforts
  - Long-term contract, 21st Century locations
    - Current contract, $495,000 – 14 sites
      - Staffing: 7.8 FTE Associates; 1 FTE Educator
      - Enrollment, 900 youth
  - Short-term, contract
    - 4-H Science Club, semester (6-12 weeks)
      - Contract employee, project “club” focused

*4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER*
PARTNERING WITH AFTERSCHOOL PROVIDERS

• Quality Program
  – “complex youth development”, 6 hours
  – Project-based learning
  – Represent quality

• Revenue Generation
  – Best fit, teamwork
    • 4-H curricula, meets national learning standards
TRAINING OTHERS TO DELIVER HIGH QUALITY SCIENCE PROGRAMMING

• Partnerships
  – Discover the training needs of the afterschool site

• Offer quality training
  – Registration, content, presenters

• “Learning by Doing” facilitation
  – replica of desired implementation

4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER
TRAINING OTHERS TO DELIVER HIGH QUALITY SCIENCE PROGRAMMING

• Availability
  – Mid-day, monthly, school breaks

• Certified training hours
  – State requirements for licensure, CEU’s
ITEMS FOR DISCUSSION

- Recognizing 4-H Afterschool as 4-H Youth Development – Science Ready Programming
- Building capacity through partnerships, associate staff, collaborating staff, volunteers, teenagers
- Recognition tied to the program and its timing, neighborhood, stakeholders
- Program Showcases as recognition and marketing
- Marketing and branding 4-H in afterschool
- Family Science Nights
- Involvement in the greater OST community
SUGGESTED AFTERSCHOOL RESOURCES

All links are available at: http://urban4hscience.rutgers.edu

- Afterschool Alliance STEM Resources
- Coalition for Science After School
- Frontiers in Urban Science Exploration Resource Guide
- Harvard Family Research Project OST Resources & Tools
- NPASS2 – National Partnerships for After School Science
- Science in Afterschool Literature Review
SUMMER CONSIDERATIONS

- Other youth organizations (BGC, Y), libraries, parks and recreation departments, community and neighborhood centers, housing authorities, faith based organizations
- Direct delivery vs. training collaborating staff
- Open enrollment vs. existing collaborators
- Full day vs. part of the program
Summer Considerations

- Shared and complimentary resources
- Temporary, part-time staff (teachers, college students, AmeriCorps)
- Teens as teachers/mentors
- Creativity, outdoors, application, service
- Planning, planning, and more planning
- (see case studies)
Union County 4-H Summer Science Program

PARTNERING WITH SUMMER PROGRAM PROVIDERS CASE STUDY

Jim Nichnadowicz
County 4-H Agent
Rutgers University
ELIZABETH, NEW JERSEY
Union County - a lot like Your County
4-H CLUBS

4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER
PUBLIC PRESENTATIONS
4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER

PROJECTS
POVERTY IN UNION COUNTY

February 2010 Foreclosure Rate Heat Map

Westfield - 1 in every 6090 housing units
Cranford - 1 in every 4367 housing units
Scotch Plains - 1 in every 3756 housing units
Roselle Park - 1 in every 1776 housing units
Clark - 1 in every 1456 housing units
Elizabeth - 1 in every 437 housing units
Roselle - 1 in every 297 housing units

1 in every 698 housing units received a foreclosure filing in February 2010

Foreclosure Actions to Housing Units

1 in 297 Housing Units
1 in 8,955 Housing Units

High
Med
Low
WHERE TO BEGIN?

4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER
Finding a New Funder
PROGRAM GROWTH

• Expanded from one site to 12

• From 40 children to 600
**PROGRAM EVALUATION**

- 90% said they can solve a problem better now.

- 86% said they can observe things better.

- 87% said they can do an experiment.
• 78% said they like science more than before.

• 73% said they would tell someone what they learned.

• 42% said they would like to become a scientist someday.
DONOR RELATIONS

4-H SCIENCE IN URBAN COMMUNITIES – AFTERSCHOOL AND SUMMER
END OF THE PROGRAM?

4-H SCIENCE IN URBAN COMMUNITIES — AFTERSCHOOL AND SUMMER
OUR FAITHFUL SUPPORTERS

- Kings Daughters Day School
- Neighborhood House
- Rahway Housing Authority
- Destiny Afterschool Program
- Black United Fund
- Union County Juvenile Detention Center
- Westfield Community Center
- Elizabeth Coalition to House the Homeless
FUTURE OF PROGRAM

• Fee for Service

• Train Summer Camp Staff

• AmeriCorps Volunteers
Does your county need a 4-H Summer Science Program?

• Are there struggling school districts?
Bringing Summer Science Activities to low-income youth

• Start with one center

• Create a comprehensive program

• Publicity, evaluation, and visiting speakers
CURRICULA TO CONSIDER

- **Acres of Agriculture** from National 4-H

- **Materials from the Center for Science Education at EDC**
  - In particular – Balls and Tracks, Paper Bridges, Gliders and Straw Rockets
SUGGESTED SUMMER RESOURCES

All links are available at: http://urban4hscience.rutgers.edu

- Building Quality in Summer Learning Programs: Approaches and Recommendations
- Effective and Promising Summer Learning Programs and Approaches for Economically-Disadvantaged Children and Youth
- National Summer Learning Association
Brought to you by 4-H

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