



**NISE**  
NATIONAL INFORMAL  
STEM EDUCATION  
**NETWORK**

**COLLABORATIONS & PROGRAMS**  
Partnerships with Youth-Serving  
Organizations

# Presenters

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# CHILDREN'S DISCOVERY MUSEUM



Inspiring the Love of Learning  
Through the Power of Play



Normal  
Illinois







children's  
discovery  
museum





~Exhibits  
~Education  
Programs  
~Events  
~Community  
Outreach





- Education Run Exhibits:
  - Art Studio
  - Innovation Station
- Fee For Service Programs:
  - Early Childhood
  - Homeschool
  - Summer & Day Camps
- School Based Programs:
  - Field Trips
  - Learning Labs
  - Afterschool
  - Museum in Motion



# Partnerships

- Afterschool
  - Unity Community Center
  - Parks and Recreation program
  - Other area afterschool programs
    - YMCA
    - YWCA
    - community based
- Home School
  - Area groups and individuals
  - Community partners – as instructors





# Partnerships

- Camps – Summer and Day
  - Community experts
    - University professors
    - Extension office educators
    - Local business leaders
    - Other area informal educators
- School Programs
  - Head Start
  - Children's Home + Aid
  - Unit 5 school district



# Starting Partnerships



Find the needs in your community that you are best able to help meet.

- Are there organizations that need the type of programing you provide?
- Are there other organizations looking for ways to share their expertise?

Have ideas on the back burner

- Programs you want to expand
- New program ideas

# Starting Partnerships



- Go to events where you can meet and mingle with other organizations
- Have ideas for funding
  - Sponsors
  - Grants
  - Donations





**BISHOP MUSEUM**





# Bishop Museum

COMMUNITY PARTNERSHIPS WITH THE BOY SCOUTS  
OF AMERICA AND GIRLS SCOUTS OF HAWAII



# Cub-o-ree



- Museum Overnights
- Approached by Cub Scouts for annual Cub-o-ree
- 2 weekends of overnights at the Museum offered to Cub Scouts on Oahu
- Arranged programs based on keys aspects of the Cub Scout achievement measures.



# Cub-o-ree

- Space issues – rotating the Cubs and their families through our smaller spaces- rotation schedule.
- 250 participants the first weekend
- 350 participants the second weekend
- Added to their rotation of Cub-o-ree locations

	Horsehead Nebula (Pink)	Orion Nebula (Orange)	Blue Giant Star (Blue)	Red Giant Star (Red)	Solar Eclipse (Yellow)	Lunar Eclipse (Green)
7:05-7:25	Hale Wa'a: Illustration Illusions	Lawn: Stargazing with HAS	Observatory: Telescope Talk/Science on a Sphere	Observation Deck: Galileo Telescopes	Planetarium: The Sky Tonight	Atherton: Solar System Model
7:25-7:30 ROTATE						
7:30-7:50	Lawn: Stargazing with HAS	Observatory: Telescope Talk/Science on a Sphere	Observation Deck: Galileo Telescopes	Planetarium: The Sky Tonight	Atherton: Solar System Model	Hale Wa'a: Illustration Illusions
7:50-7:55 ROTATE						
7:55-8:15	Observatory: Telescope Talk/Science on a Sphere	Observation Deck: Galileo Telescopes	Planetarium: The Sky Tonight	Atherton: Solar System Model	Hale Wa'a: Illustration Illusions	Lawn: Stargazing with HAS
8:15-8:20 ROTATE						
8:20-8:40	Observation Deck: Galileo	Planetarium: The Sky	Atherton: Solar System	Hale Wa'a: Illustration Illusions	Lawn: Stargazing with HAS	Observatory: Telescope Talk/Science on a Sphere
ROTATE						
	Hale Wa'a: Illustration Illusions	Lawn: Stargazing with HAS	Observatory: Telescope Talk/Science on a Sphere	Observation Deck: Galileo Telescopes	Planetarium: The Sky Tonight	Atherton: Solar System Model
ROTATE						
	Observatory: Telescope Talk/Science on a Sphere	Observation Deck: Galileo Telescopes	Planetarium: The Sky Tonight	Atherton: Solar System Model	Hale Wa'a: Illustration Illusions	Lawn: Stargazing with HAS





# Girl Scout Sleepovers

## Customizing for Girl Scouts

- ▶ Approached by the Leader of Programs
- ▶ Refers Girl Scout troops to the Museum
- ▶ Develop programs specific to the troop's needs



# **MID-AMERICA SCIENCE MUSEUM**





# Hot Springs National Park, Arkansas

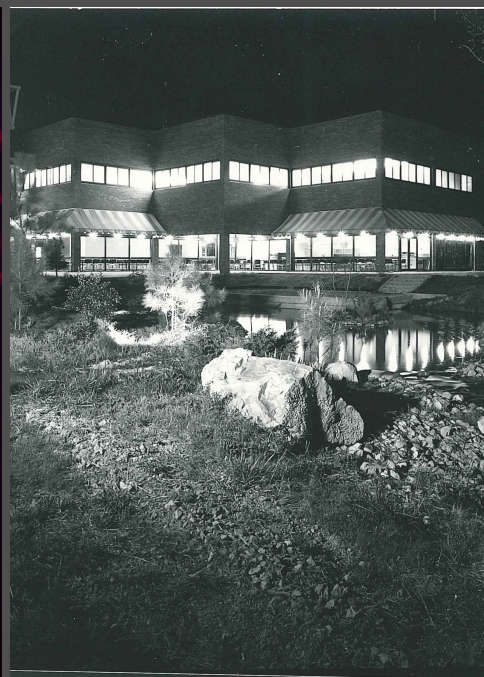




# Hot Springs National Park

- Population 35,000
- Over 2 million visitors
- America's first reserve
- Former playground of Al Capone
- Spring Training Camp for Major League Baseball





Mid-America Science Museum  
Est. 1979





2015  
Renovation





# Bob Wheeler Science Skywalk

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# Using NISEnet Kits

- Outreach
- Girls in STEM
- Science After School





# Conway EcoFest

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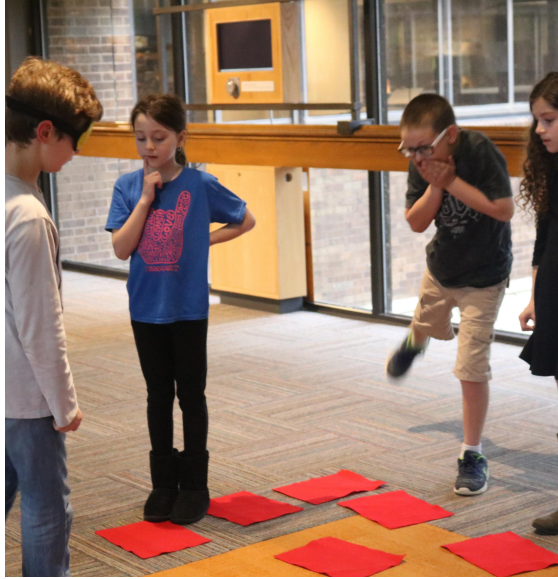
Girls in STEM

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# Girls in STEM



# Science After School





# Science After School

# Hot Springs School District Year at a Glance Curriculum Map 2018-2019

	Unit 1	Unit 2	Unit 3	Unit 4
Kindergarten	<u>Weather and Climate</u>	<u>Forces and Interactions: Pushes and Pulls</u>	<u>Interdependent Relationships in Ecosystems: Needs of Animals and Plants</u>	<u>Interdependent Relationships in Ecosystems: Humans and Their Environment</u>
1st Grade	<u>Space Systems: Patterns and Cycles</u>	<u>Structure, Function and Information Processing</u>	<u>Waves: Light</u>	<u>Waves: Sound</u>
2nd Grade	<u>Structure and Properties of Matter</u>	<u>Earth's Systems: Processes That Shape the Earth (Land and Water)</u>	<u>Earth's Systems: Processes That Shape the Earth</u>	<u>Interdependent Relationships in Ecosystems</u>
	K-2. <u>Engineering Design</u>			
3rd Grade	<u>Interdependent Relationships in Ecosystems</u>	<u>Weather and Climate</u>	<u>Forces and Interactions</u>	<u>Inheritance and Variation of Traits</u>
4th Grade	<u>Structure, Function, and Information Processing</u>	<u>Energy</u>	<u>Waves: Waves and Information</u>	<u>Earth's Systems: Processes That Shape the Earth</u>
5th Grade	<u>Structure and Properties of Matter</u>	<u>Matter and Energy in Ecosystems</u>	<u>Earth's Systems</u>	<u>Space Systems: Stars and the Solar System</u>
	3-5. <u>Engineering Design</u>			
Color Key	Life Science	Physical Science	Earth Science	



# CHILDREN'S MUSEUM OF HOUSTON

# OVERVIEW



## SITES

- 115 AFTERSCHOOL SITES
- 9 21<sup>ST</sup> CLC SITES
- 18 OUTREACH SITES
- 12 ECC SITES
- 154 TOTAL SITES
- ROUGHLY 4700 STUDENTS SERVED WEEKLY



# OVERVIEW



## CURRICULUM

- AMPHIBIANS – ALL SITES DO TOGETHER
- ROTATION UNITS – AERODYNAMICS, THE BRAIN, CHEMISTRY, ELECTRICITY AND MUSICAL INSTRUMENTS
- ENGINEERING – ALL SITES DO TOGETHER
- ECC – BIOLOGY, CHEMISTRY, SCIENCE OF ART, NANO, ENERGY, LEGOS, ANIMALS

# OVERVIEW

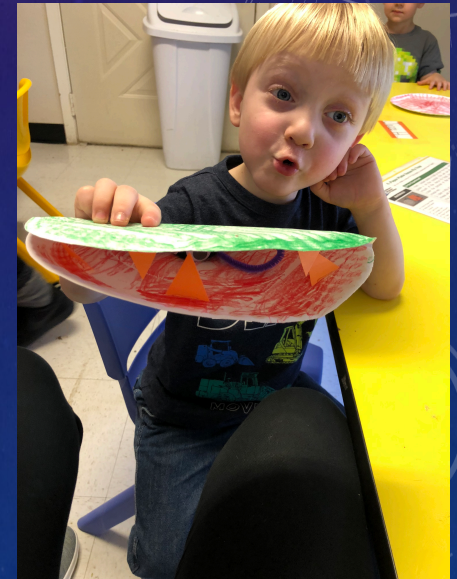
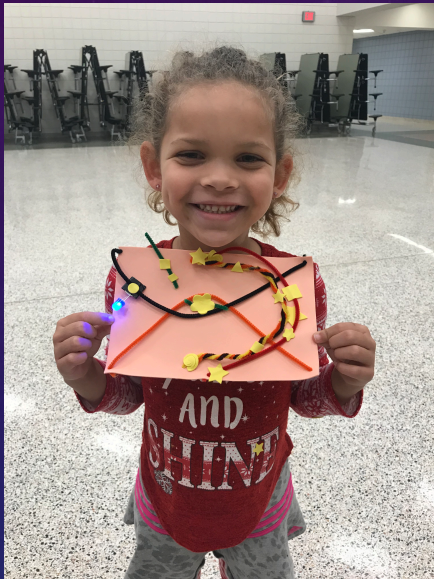


## TRAINING

- 1<sup>ST</sup> SATURDAY – KENDRA & LARRY'S GROUP (DAVID), TERESA, BOBBY & BRENDA'S GROUP (JASON) AND SHAUN'S GROUP (JASON)
- 2<sup>ND</sup> SATURDAY – ECC (JENIFER AND JENNIFER)
- 3<sup>RD</sup> SATURDAY – SUSAN & ANGEL'S GROUP (DAVID) AND JOCOLE & JENNIFER'S GROUP (JASON)
- TRAIN UP TO 325 COUNSELORS A MONTH



# LED BLING, BRAILLE, FLASHLIGHTS AND FLY TRAPS



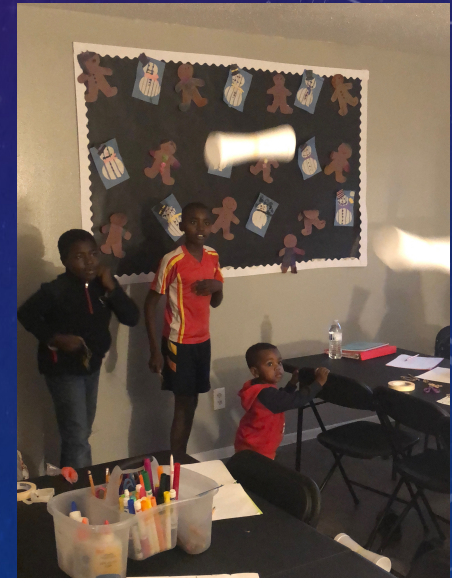
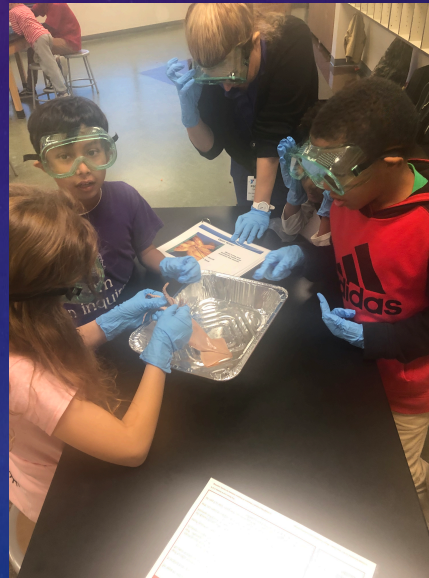
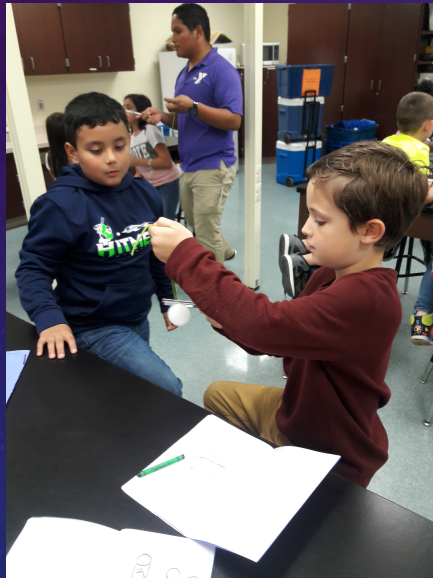


# JOURNALS AND PHEROMONES





# WATER FILTRATION, ACOUSTICS, SQUID DISSECTION AND MAGNUS GLIDER



# **NISE NET RESOURCES**



# Collaboration Tools & Resources



**MUSEUM & COMMUNITY PARTNERSHIPS:**

## Collaboration Guide

*For museums working with community youth-serving organizations*

By Catherine McCarthy and Brad Herring



# Collaboration Tips

1. Why collaborate? To achieve something you can't do on your own!
2. Be patient! Collaborations take time.
3. Be clear about your goals and expectations.
4. Get to know each other. Each partner has a lot to offer.
5. Communication is critical.
6. Stay focused on your goals. And don't forget to celebrate your successes!

Museum & Community Partnerships

## Collaboration Tips



### **Why collaborate? To achieve something you can't do on your own!**

- To share resources, expertise, and connections
- To build upon existing strengths
- To reach new audiences

### **Be patient! Collaboration takes time**

- Start small; developing a relationship and building trust takes time
- Communicating takes time: your organizations have different cultures and terminology
- Always keep the long-term relationship in mind while working on shorter-term projects

### **Be clear about your goals and expectations. Discuss who, what, when, where and why.**

- What: Decide on your common goals; be sure your partnership is mutually beneficial
- How: Agree upon activities to meet your shared goals and missions
- Who: Clarify your roles and responsibilities for all project activities
- Where: Decide upon the locations of activities
- When: Agree upon a timeline and key dates, and check in regularly

### **Get to know each other. Each partner has a lot to learn and a lot to offer.**

- Familiarize yourself with your partner organization through websites, newsletters, events, and other opportunities
- The more you understand about each others' purpose, activities, audiences, and culture, the easier your partnership will be
- Individuals come to a partnership with different strengths and experiences; every group needs dreamers, developers, and doers

### **Communication is critical!**

- Strive to achieve a flexible trusting atmosphere; be open and honest while still being tactful and supportive
- Things may not always go smoothly, so don't hesitate to pick up the phone and have an frank conversation to work things out
- Involve more than one contact person at each organization at different levels to ensure a deeper relationship that can survive changing circumstances and turnover

### **Stay focused on your goals. And don't forget to celebrate your successes!**

- Reflect on your partnership and project based on your original goals, and consider how you want to improve, change course, or evolve the relationship
- As you work together keep your long-term relationship in mind; by leveraging your combined resources and strengths, you can each do much more for your community

*Watch for a more comprehensive guide to collaborations between museums and community organizations in the Explore Science kit!*



# Text for contacting potential partners

## Sample text for an invitation to collaborate email

**Subject:** Invitation to collaborate on a STEM project with <organization's name>

Dear <Contact at local youth-serving organization>,

I recently learned about an opportunity to engage under-served children in our community with STEM, and I wonder if it might be a mutually beneficial chance for our organizations to collaborate on this project.

The <My organization> has the opportunity to apply for a free “Explore Science” kit of materials designed to help museums collaborate with a local youth-serving organization to reach underserved children in our community and engage them in nanotechnology.

<My organization> has been collaborating with a national network of museums and scientists for the past several years called the Nanoscale Informal Science Education (NISE) Network, which is dedicated to fostering public awareness, engagement, and understanding of nanoscale science, engineering, and technology. We have received other kits from the Network in previous years, and they are filled with many fun, hands-on activities that work well with a wide range of audiences including younger children, which will be incorporated into the Explore Science kit. The activities in the Explore Science kit are designed for children in grades 1-6 in afterschool programs, family science nights, and other out-of-school settings

Partnering on this project would be a great way to engage children in our community on this exciting new field of science and technology. I am planning to submit an application, and I would like to invite you and your colleagues to collaborate with us on programming that uses the Explore Science kit focused on nanoscience. One requirement for the application is that we are required to specify our community partner and briefly describe our proposed plans for collaboration.

<Insert brief, personalized sentence about what value the museum can provide to the community organization—how do the two organizations' missions may align>

To help you decide if you would like to discuss this opportunity further, I'm including some background information about the project below.

Would you please let me know by <date> if you are interested in learning more about this potential collaborative project? If you are, I'd like to set up a time for us to have a short conversation either in person or on the phone to discuss possible ways we can collaborate. I look forward to hearing from you.

- Friendly invitation to discuss possibilities
- Sets the stage to discuss roles and responsibilities

# Memorandum of Understanding

## SAMPLE TEMPLATE

### MEMORANDUM OF UNDERSTANDING (MOU)

between

\_\_\_\_\_ (Organization A)

and

\_\_\_\_\_ (Organization B)

#### Preamble:

The purpose of this Memorandum of Understanding (MOU) is to clarify the expectations, roles, and responsibilities of the collaboration between our two organizations (Parties) on **PROJECT XXXXXX** (Project). This is not a legally binding agreement.

#### Intent to Collaborate

It is the intent of the Parties to jointly collaborate on the implementation of the Project.

#### Background

The Project has the following purpose:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

#### Timeline:

- The overall project will take place between **Date** and **Date**.

The Project has the following key milestones

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

#### Roles and Responsibilities

##### Both organizations will:

- **Communicate as needed about the implementation and progress of the project**
- \_\_\_\_\_
- \_\_\_\_\_

##### Organization A will provide:

- **Training/orientation (where/when):** \_\_\_\_\_
- **Activities/Implementation: (where/when/who)** \_\_\_\_\_
- **Evaluation/Reporting: (when)** \_\_\_\_\_

##### Organization B will provide:

- **Training/orientation (where/when):** \_\_\_\_\_
- **Activities/Implementation: (where/when/who)** \_\_\_\_\_
- **Evaluation/Reporting: (when)** \_\_\_\_\_

#### Coordination and Communication:

Most of the communication about the Project will take place between the two primary contact people. The primary contact people for each organization are:

##### Organization A - Primary Contact:

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

##### Organization A - Additional Contact:

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

##### Organization B - Primary Contact:

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

##### Organization B - Additional Contact:

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

#### Modifications to this MOU:

This Memorandum may be modified with supplemental written agreements signed by the parties and can be terminated in writing, in whole or in part, by consensus of the parties.

#### Acknowledgment:

The following parties jointly agree to the roles and responsibilities delineated in this Memorandum of Understanding:

##### Organization A:

Organization Name: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

##### Organization B:

Organization Name: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Profiles of Youth Serving Organizations

1. 4-H
2. Afterschool Alliance
3. Boys & Girls Clubs of America
4. Boy Scouts of America
5. Girls Inc.
6. Girl Scouts
7. Libraries
8. National Girls Collaborative Project
9. Parent Teacher Association (PTA)
10. Y (YMCA)
11. YWCA

## 4-H

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### ABOUT

4-H is a global network of youth organizations whose mission is engaging youth to reach their fullest potential while advancing the field of youth development. 4-H is the youth development program of our nation's Cooperative Extension System & USDA. The 4-H name represents four personal development areas (head, heart, hands, and health) that members work on through fun and engaging programs.

### AUDIENCE AND GEOGRAPHIC REACH

4-H is the nation's largest youth development organization, empowering six million young people throughout all 3,007 counties of the United States. Through America's 110 land-grant universities and its Cooperative Extension System, 4-H reaches every corner of our nation—from urban neighborhoods to suburban schoolyards to rural farming communities. 4-H has a network of more than 611,800 volunteers, 3,500 professionals, and more than 25 million alumni. In most states, kids can join 4-H if they're between the ages of 8 and 18; some states offer programs for younger children.

### WEBSITE

- <http://www.4-h.org>

### FINDING A LOCAL PARTNER

There are 4-H programs in every county in the United States:

- <http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/>

### STEM FOCUS AND RESOURCES

4-H has a long history of “learn by doing” and focuses on many topics including: robotics, alternative energy, engineering, environmental science, ag-science, and veterinary science.

- Science programs: <http://www.4-h.org/youth-development-programs/4-h-science-programs/>
- Curriculum: <http://www.4-hmall.org/Category/educationresources.aspx>
- Science training resources: <http://www.4-h.org/resource-library/professional-development-learning/science-training-guides-resources/>
- Science checklist: <http://www.4-h.org/Professional-Development/Content/Science/Building-Understanding/4-H-Science-Checklist.dwn>
- Online STEM professional development: <http://www.click2sciencepd.org/>

### TIPS FOR COLLABORATION

- *Ongoing:* Collaborate with a local 4-H club leader to plan activities within the regular club structure, location, and activities; this can providing opportunities for repeat visits with the same children
- *Special event:* Collaborate with a local 4-H club for a special event at the museum or another location

# Annotated Bibliography

## Annotated Bibliography

### COLLABORATIONS—GENERAL

#### Collaboration Toolkit

Author: Center for Nonprofit Excellence (2012).  
*Collaborative tools and resources including a toolkit.*

Free online resources:

<http://thecne.org/building-collaborative-relationships>

<http://thecne.org/collaboration>

#### Partnerships: Frameworks for Working Together Strengthening Nonprofits: A Capacity Builder's Resource Library

Author: Compassion Capital Fund (CCF) with assistance from Mark Publow; updated by the National Resource Center for DHHS (2010).

*This guidebook is designed for any organization or coalition of organizations that want to know more about establishing and managing partnerships.*

Free online resources:

<http://strengtheningnonprofits.org/resources/guidebooks/Partnerships.pdf>

#### Building Effective Community Partnerships: Systems Improvement Training and Technical Assistance Project (SITAP)

Author: Institute for Educational Leadership for the US Department of Justice (2002), 35 pages.

*This toolkit is designed to provide ideas and links to other resources that will increase the capacity of demonstration projects engaged in systemic reform efforts to bring together organizations and individuals, develop shared goals, and implement strategies to achieve them.*

Free online resources:

[http://www.ccitoolsforfeds.org/doc/building\\_effective\\_community\\_partnerships.pdf](http://www.ccitoolsforfeds.org/doc/building_effective_community_partnerships.pdf)

#### Collaboration Toolkit: How to Build, Fix, and Sustain Productive Partnerships

Authors: Rinehart, Tammy A., Laszlo, Anna T., and Briscoe, Gwen O. (2001), Washington, DC: U.S. Department of Justice, Office of Community Oriented Policing Services.

*Guide to collaboration related to community policing in collaboration with schools and community organizations.*

Free online resources:

[http://www.cops.usdoj.gov/html/cd\\_rom/collaboration\\_toolkit/pubs/collaborationtoolkit.pdf](http://www.cops.usdoj.gov/html/cd_rom/collaboration_toolkit/pubs/collaborationtoolkit.pdf)

#### Learning to Make Choices for the Future: Connecting Public Lands, Schools, and Communities through Place-based Learning and Civic Engagement

Delia Clark (2012) The Center for Place-based Learning and Community Engagement.

*This manual was originally conceived through the work of the Forest For Every Classroom project and includes information on building and sustaining strong community partnerships.*

Free online resources:

[http://www.promiseofplace.org/assets/files/PBE\\_Manual\\_2012.pdf](http://www.promiseofplace.org/assets/files/PBE_Manual_2012.pdf)

#### Community Tool Box website

Author: Work Group for Community Health and Development at the University of Kansas (accessed 2015).

*The Community Tool Box is a free online resource for those working to build healthier communities and bring about social change by connecting people, ideas, and resources.*

Free online resources:

<http://ctb.ku.edu/en/overview>

### COLLABORATIONS AND COLLECTIVE IMPACT

#### The Big Picture Approach to Community Impact

Author: The Forum for Youth Investment website (accessed 2015).

*Ready by 21 is the Forum for Youth Investments' initiative with strategies for communities and states to improve the odds that all children and youth will be ready for college, work and life. Extensive toolkit of resources for mapping strategies and measuring success.*

Free online resources:

<http://forumfyi.org/thebigpictureapproach>

<http://www.readyby21.org>

#### STEM Ecosystems website

Author: supported by the STEM Funders Network (accessed 2015).

*Cultivating a STEM learning ecosystem to meet the needs of all young people requires intentional and strategic action toward shared goals; includes collaborative planning tools.*

Free online resources:

<http://www.stemecosystems.org>

#### Collective Impact Forum website

Author: FSG and the Aspen Institute Forum for Community Solutions (accessed 2015).

*Tools, resources, and advice about collective impact.*

Free online resources:

<http://collectiveimpactforum.org>

#### Charting a Course for Change: Advancing Education, Income, and Health Through Collective Impact

Author: United Way, (2013).

*White paper and toolkit lays out the community strategies experts say work best to improve education, financial stability and health, and how you can turn strategies into action.*

Free online resources:

<http://www.unitedway.org/blog/charting-a-course-for-change>



# Video: Creating Successful Collaborations: Museum and Community Partnerships



Available at: <https://vimeo.com/139256428>

# Thank You

