Welcome to the National Girls Collaborative Project Webinar:

Bringing STEM Learning to Public Libraries: Collaboration and Resources for Librarians

Thank you for joining us! We will begin at 11:00 AM Pacific/ 2:00 PM Eastern.
Webinar Agenda

• Introduction to NGCP
• Introduction to STAR_Net Project
• STEM Programming in Libraries
• Resources Available on the STAR_Net Community of Practice
• Questions and Discussion
National Girls Collaborative Project

The National Girls Collaborative Project (NGCP) brings together organizations that are committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM).

www.ngcproject.org
Current Collaboratives

- Arizona
- California
- Colorado
- Connecticut
- Florida
- Georgia
- Great Plains (ND, SD)
- Illinois
- Indiana
- Kentucky
- Louisiana
- Maine
- Michigan
- Mid-Atlantic (DC, DE, MD, VA)
- Minnesota
- Missouri
- Montana
- New Hampshire/Vermont
- New Jersey
- New Mexico
- North Carolina
- Ohio
- Pacific Northwest (AK, HI, ID, OR, WA)
- Pennsylvania
- Southern New England (MA, RI)
- Texas
- Tennessee
- Wisconsin
Project Goals

1. Maximize access to shared resources within projects and with public and private sector organizations and institutions interested in expanding girls’ participation in STEM.

2. Strengthen capacity of existing and evolving projects by sharing exemplary practice research and program models, outcomes and products.

3. Use the leverage of a network or collaboration of individual girl-serving STEM programs to create the tipping point for gender equity in STEM.
## NGCP Program Directory

**Program Name**

**City** | **State** | **Zip Code**
--- | --- | ---

**Organization** | **Affiliation**

**Web Only / All-States Resource**
- Limit search to only include national programs or programs that provide services via the Web.

**Program Focus**
- Science
- Technology
- Engineering
- Math
- Computer Science
- Business
- Humanities
- Arts
- To make multiple selections hold down the Ctrl key while clicking.

**Resources Needed**
- Computer access
- Computer technology support
- Conferences
- Equipment donations
- Evaluation/Assessment services
- Facilities
- Funding
- Girls interested in STEM activities
- Internships
- Job shadowing

**Resources Available**
- Computer access
- Computer technology support
- Conferences
- Equipment donations
- Evaluation/Assessment services
- Facilities
- Funding
- Girls interested in STEM activities
- Internships
- Job shadowing

**Populations Served**
- At-risk
- Diversity focus
- Elementary
- Employers
- High School
- Homeless
- Incarcerated Youth
- Low income
- Middle/Junior

**Collaboration Interests**
- Joint event planning
- Providing in-kind support
- Sharing resources
- Sponsorship

**Service Delivery Format**
- After school programs
- Classroom support
- Clubs
The STAR Library Education Network, or STAR_Net Project

STAR stands for Science-Technology Activities and Resources

Goals

- Bring informal STEM learning experiences to libraries, especially rural libraries
- Support libraries that are providing STEM learning or want to start
- Build and sustain a Community of Practice (CoP) between librarians and STEM professionals
- Evaluate the effectiveness of the project components and disseminate the results to the informal science education community

The STAR_Net Project is led by the National Center for Interactive Learning at the Space Science Institute
STAR_Net Components

Evaluation/Research

Tour
Discover Earth & Discover Tech Exhibits
Outreach
Online Community of Practice
Training
Project Partners

- National Center for Interactive Learning at the Space Science Institute
- American Library Association
- Lunar and Planetary Institute
- National Girls Collaborative Project
The ALA Public Programs Office (http://www.ala.org/offices/ppo) provides leadership, resources, training, and networking opportunities that help thousands of librarians nationwide develop and host public programs for adult, young adult, and family audiences.

The mission of the ALA Public Programs Office is to foster programming as an integral part of library service in all types of libraries. Projects include traveling exhibitions and book and film discussion series on many topics, including Science, Technology, Engineering and Math. Several thousand libraries and librarians receive programming support from the Public Programs Office annually.
Engineers Make a World of Difference

- New traveling exhibition about engineers creating practical solutions to help address societal wants and needs in our country and throughout the world.

- 750-square-foot exhibition includes many interactive elements--an inventor’s lab, a quiz game about engineering, methods for measuring family energy use, the work of Engineers Without Borders, and much more.

- Applications open: March 1, 2012. On that date, please see http://www.ala.org/offices/ppo for details.

- Application deadline: May 1, 2012; selections announced June 29, 2012
STEM Programming in Your Library
Explore Program

For over a decade, the Explore program has served librarians and other out-of-classroom program providers by:

• Creating and distributing **hands-on activities**
• Providing **training** to children's and youth librarians and other out-of-classroom program providers
• Connecting libraries with other informal institutions through **partnerships**
• Disseminating Earth and space science **resources** to the Explore network of over 600 members
Resources Online

• Hands-on activities and resource lists
  – Lunar exploration; the planets Earth, Jupiter, and Mars; rockets; health in space; and more!
    http://www.lpi.usra.edu/explore/
  – Discover Earth: coming soon to
    http://cop.discoverexhibits.org!
Visions of the Universe: Four Centuries of Discovery

• Dark Matter and Future Telescopes – University of Michigan Dr. Monica Valluri from the Department of Astronomy
• Living on a Dusty Moon – Glenn Research Center NASA engineer Dr. Kenneth Street
• Starlab Mobile Planetarium – Ann Arbor Hands on Museum
Visions of the Universe
Johnston Public Library, Johnston, Iowa

Research, reach out & rely on your resources
• ALA; Harvard-Smithsonian Center for Astrophysics; Scientists on Reserve; & local resources
• Connect w/people early and reconnect again. Consider on-site visits.
• Make an impression
  • grand opening; press; speaker 101
Visions of the Universe
Johnston Public Library, Johnston, Iowa

• Partners
  – 4-H; Boy Scouts; Girl Scouts; community organizations; schools; other libraries; local astronomy club; Science Center of Iowa; other museums; newspapers; TV. stations; radio stations; local colleges & universities; Camp Dodge (military facilities); listserv’s; websites; social networks; key community people; and local businesses
- Mad Science Space Phenomena & Space Travel programs
- Story times, family movie, & town festival craft
- Science Center of Iowa’s Star Lab & School Field Trip
- Visions of Astronomy Careers
- “Night Out With the Stars!”
- Lunar Module Landing Contest
Contact Info

Cheryl Heid
Johnston Public Library
Johnston, IA
515-278-5233
heid@johnstonlibrary.com
www.johnstonlibrary.com
Potential Collaborators

- 4-H
- Department of Education
- State Science Teachers Association
- State Math Teachers Association
- State Association for Career & Technical Education
- Professional Associations (*Society of Women Engineers, National Society of Black Engineers, etc.*)
- K-12 afterschool programs
Potential Collaborators

- YMCA/YWCA
- Girl Scout Councils
- Boy Scouts
- Girls Inc. Affiliates
- Math/Science/Tech Schools
- Science Museums and Aquariums
- Boys & Girls Clubs
- Local colleges and universities (*Check with engineering departments, computer science departments, women’s resource centers, etc.*)
Community of Practice
http://community.discoverexhibits.org

• Members – sharing resources and learning from one another
• STEM activities and programming Ideas
• Opportunities to collaborate on programming

Joining the CoP:
Send an e-mail to Anne Holland at
aholland@spacescience.org
Welcome to the STAR_Net Project's Community of Practice

Libraries provide lifelong learning opportunities to millions of people every day. The STAR_Net project is developing two hands-on exhibits — Discover Earth and Discover Tech — that will travel to public libraries across the country. The project is also forming a Community of Practice (CoP) for professionals — librarians, scientists, engineers, educators, and others — who want to provide and/or support STEM learning experiences in libraries.

This community is open to those librarians who are hosting the project’s exhibits, as well as to those who aren’t but are interested in STEM programming. Members of this community will be able to communicate with each other and share ideas and resources for bringing STEM learning experiences to libraries.

This Web site is a place where librarians and STEM professionals can explore ways to collaborate to support existing STEM programming in libraries and develop new programming. For example:

- STEM Exhibits
- Science Cafes
- Ask a Scientist Events
- Make a Rocket
- Build a Robot
- STEM Talks
- Public Forums on STEM Issues
- Hands-on STEM Activities
- Astronomy Events
- Skype Talks with NASA Scientists

STEM stands for Science, Technology, Engineering, and Mathematics

The National Center for Interactive Learning at the Space Science Institute is leading the STAR_Net project and development of the Discover Earth and Discover Tech exhibitions. Project partners include the American Library Association, the Lunar and Planetary Institute, and the National Girls Collaborative Project.

Announcements

<table>
<thead>
<tr>
<th>Title</th>
<th>Modified</th>
</tr>
</thead>
</table>

Add new announcement
Questions
Get Involved with NGCP

- NGCP Program Directory
  www.ngcproject.org/directory

- Receive the NGCP E-newsletter
  www.ngcproject.org/resources/newsletter.html

- Archived Webinars
  www.ngcproject.org/resources/webcastarchive.cfm

- Like us on Facebook
  National Girls Collaborative Project
Get Involved

Next Webinar:  
March 14, 2012  
11:00 AM Pacific/ 2:00 PM Eastern

Effective Tools You Can Use to Change the Image of Computing Among Girls