



Contracting Opportunity

Assessment of relevant formal and informal STEM products and services that are transferable to and/or currently used within a public library environment

Posted: August 24, 2014

Contract Objective: to identify and assess relevant formal and informal STEM (science, technology, engineering and mathematics) products, services and organizations (such as nonprofits, academia and within state library systems) that public libraries are currently implementing or could have access to. This effort will inform Cornerstones about national trends, models to offer programming, leading STEM organizations and resources that can be used and/or adapted for use by public libraries and their patrons.

Primary Point of Contact

Cynthia Randall, Executive Director (207) 844-0620

Timeframe

Work to be completed by September 30, 2014

Budget

\$2,000 – payment upon submission of satisfactory final product

Contractor qualities

- Familiar with informal science education and STEM (science, technology, engineering and mathematics)
- Demonstrated ability to work independently
- Skilled in conducting internet searches
- Able to condense large amounts of information into concise narratives

Context/Core tenants/basic building blocks for this initiative

- Cornerstones is a small non-profit with a big informal STEM literacy objective;
- Cornerstones must wisely manage its limited human and fiscal assets;
- Cornerstones does not have the resources to develop “from scratch” informal STEM programming and services for public libraries;

- The most efficient path forward is for Cornerstones to learn about STEM efforts that are applicable to people that visit public libraries, and bring effective STEM programming to Cornerstones partner libraries. (This can be done by partnering with the entity that created these programs/services OR by adapting the best elements to a library audience.) Cornerstones will provide the contractor with a list of 20+ organizations, products, services and models that should be researched. The contractor is expected to identify a comparable number of organizations, products, services and models.
- While Cornerstones seeks to learn from all sources a priority for this initiative is STEM programming by public libraries.
- STEM programming and services relevant to this effort are presently available from zoos, aquaria, museums, science centers, planetariums, discovery centers and a plethora of other non-profit organizations. Academic and for-profit entities should also be considered.
- Priority categories of STEM organizations, programming, services and models include:
 - Adapting building space to support STEM literacy efforts (e.g., [Makerspace](#), interactive exhibits, kiosks, displays, etc.);
 - Scientific tools and tutorials that can be checked out like a book (e.g., telescopes, microscopes, environmental testing kits, etc.) as well as STEM tools for use in a library (e.g., 3-D printers, etc.);
 - Theme-based science trunks and kits (e.g., robotics, health, water quality, food security & hunger, etc.);
 - Training programs for STEM service providers (e.g., librarians, volunteers, community partners, etc.);
 - Coalition building (e.g., connecting STEM speakers with library audiences, strategic alliances that bring together libraries, corporations, non-profits, etc., community partner development, etc.);
 - Access to STEM books, multi-media, and presentations (e.g., science cafes, lectures, etc.)
 - Evaluation results of any pertinent STEM literacy effort implemented by libraries, organizations working with libraries, products and services;
- Current Cornerstones STEM priorities include:
 - Food, Gardens, Insects, and Agriculture
 - Personal and Family Health Issues, The Human Body, All Things Microscopic, Genetics and Me;
 - STAR (Sharing Telescopes and Astronomical Resources) Program, Stargazing, Space Exploration, Astronomy; and
 - Other – World of Birds, Snakes, Frogs, and Mammals; Our Environment; How Things Work; and the Impact of Science, Technology, Engineering and Mathematics In Our Lives

Cornerstones is most interested in STEM products and services that are currently being used and/or created in the past 5-years.

Final Products

1. A Word document that contains completed 50+ data sheets (see template below) on STEM programming and services that currently is or could be offered (or adapted) in a public library. (The contractor will test the template with 3-5 entries and share preliminary results with CoS. Adjustments to the template may be required.)
2. 1-2 pages of “recommended next steps” that would identify other research to be conducted and organizations to contact.
3. An appendix that contains 2-sentences narrative on STEM products and services and pertinent hotlinks that the contractor thought should be explored by CoS at some future point

STEM Products and Services Assessment Data Form

1. Name of Product, Service or Model with hotlink
2. Name of parent organization and hotlink to their homepage
3. Contact information (name of person, phone number and email address)
4. Description of product/service or model (2-3 sentences)
5. Contractor Assessment
 - Primary audiences
 - Use in public libraries (yes/no)
 - Insights into how product/service was developed (e.g., the methods used, timing, partners, costs to develop, etc.)
 - Description of training for service providers to use materials
 - Places materials are used (check boxes for zoos, aquaria, museums, science centers, planetariums, discovery centers, other)
 - Scope of geographic impact (city, county, etc.)
 - Primary partners
 - In the development of the materials
 - In the use of the materials
 - Role of state or local libraries
 - Role of trade associations or professional organizations
6. Applicable qualitative and quantitative assessment information (Hotlinks to websites or reports)
 - Information collected during the use of the materials
 - Information and/or evaluations on the results/impact on end users/audiences
7. Expense and income
 - Information on the cost to develop product/service
 - Source of funds used to create product/service
 - Information on sales/price of product/service if commercially available