

# STEM in Afterschool Resources

## CURRICULA AND PROJECT IDEAS

### National Resources:

- SEDL & National Center for Quality Afterschool – The Consumers Guide to Afterschool Resources (<http://www.sedl.org/afterschool/guide/science/>)  
Resource guide contains reviews of high-quality, hands-on content for afterschool programs. Materials include curricula, activity kits, instructor guides, and web sites that offer content appropriate for afterschool programs.
- Thinkfinity Afterschool (<http://www.thinkfinity.com/AfterSchoolHome.aspx>)  
Math and Science activities, lesson plans, and interactives for elementary to high school age youth, pre-selected for afterschool practitioners.
- Great Science for Girls (<http://www.edequity.org/gsg/>)  
A collection of resources, research, and evaluation details for afterschool programs interested in providing informal STEM learning opportunities to girls.

### Guides, Activity Plans, and Project Ideas:

- Access Excellence at the National Health Museum (<http://accessexcellence.org/>)  
Collection of health and science activities.
- Techlinks for CTCs: Science, Math, Health & Literacy Activities for Community Technology Centers ([http://www.deltasee.org/trainers/trainers\\_CTCactivities.htm](http://www.deltasee.org/trainers/trainers_CTCactivities.htm))  
Publication contains 34 inquiry-based science, math, health and literacy activities.
- Connecting to the Future ([http://education.nasa.gov/divisions/informal/overview/R\\_NASA\\_and\\_Afterschool\\_Programs.html](http://education.nasa.gov/divisions/informal/overview/R_NASA_and_Afterschool_Programs.html))  
Science curriculum designed for use during K-6<sup>th</sup> afterschool programs.
- Design Squad ([http://pbskids.org/designsquad/parentseducators/getting\\_started.html](http://pbskids.org/designsquad/parentseducators/getting_started.html))  
Engineering activities designed for upper elementary (9-12 year-olds) in afterschool programs.



- Dragonfly TV (<http://pbskids.org/dragonflytv/>)  
Based on the popular PBS television show, the Dragonfly TV website hosts a collection of activities, online interactives, and an educator's guide.
- Education.com – Math & Science Activities and Games (<http://www.education.com/activity/all-grades/>)  
Search by topic or grade for a number of math and science activities.
- Exploratorium (<http://www.exploratorium.edu/index.html>)  
The Exploratorium features tools for STEM learning and teaching.
- The Franklin Institute (<http://www.fi.edu/learn/learners.php>)  
Provides free science activities designed for both school and afterschool settings.
- The Fun Works (<http://www.thefunworks.org/>)  
A website for middle school aged youth that links their interests to STEM careers.
- The Greens Activity Guide (<http://meetthegreens.pbskids.org/>)  
A website for young people interested in environmental issues and green living, includes an excellent activity guide and online interactives.
- Intercultural Center for Research in Education (INCRE) - Afterschool Explorations in Science ([www.incre.org](http://www.incre.org))  
Curriculum designed specifically for use by afterschool programs for youth in grades 4-8.
- Kinetic City (<http://www.kineticcity.com/>)  
Web-based after-school science club for youth, ages 8 through 11.
- Mixing In Math (<http://mixinginmath.terc.edu/>)  
Website written specifically for afterschool educators that provides activities to add math concepts into programming.
- Center of Science Education - Explore It! (<http://cse.edc.org/curriculum/exploreit/>)  
Curriculum encourages young people to explore familiar phenomena in an extended manner using simple materials to foster science learning.
- The Ruff Guide to Science (<http://pbskids.org/fetch/parentsteachers/activities/ruffguide.html>)  
Hands-on activities for youth ages 8-10, which include step-by-step instructions and discussion questions.
- Science and Everyday Experiences (<http://www.deltasee.org/families/handson.htm>)  
Great collection of inquiry-based science and math activities.
- Simply Science (<http://wonderwhy.mediasmm.org/>)  
Features a searchable database of hands-on science activities for all ages.
- Try Science.com (<http://www.tryscience.org>)  
Features online and offline science activities.
- Women's Adventures in Science (<http://www.iwaswondering.org/>)  
Website that links young women to STEM professionals through storytelling, hands-on activities, and online interactives.



- Women in Engineering Network (<http://www.wepan.org/displaycommon.cfm?an=1&subarticlenbr=39>)  
Hands-on activities that introduce young people to engineering.

## PROFESSIONAL DEVELOPMENT

- Afterschool Toolkit (<http://www.sedl.org/afterschool/toolkits/>)  
Good all around resource for STEM in afterschool. Includes tools and activity ideas for bringing STEM into the afterschool site.
- NPASS Professional Development: (<http://cse.edc.org/products/npassprofdevguide/>)  
Site provides training modules for preparing staff to facilitate and lead STEM activities. Resources include training handouts and slides.
- Tech Bridge: The Toolkit for Role Models ([http://www.techbridgegirls.org/role\\_models.asp](http://www.techbridgegirls.org/role_models.asp))  
Toolkit offers tips and suggestions for incorporating scientist in meaningful ways in your programming. Also provides simple science activities to do with young people.
- Association of Science and Technology Centers (ASTC) (<http://www.astc.org/>)  
ASTC can connect you with science centers across the globe. Many Science and Technology centers offer free science activities and in some cases provide professional development in STEM.
- Academic Content, Afterschool Style: A Notebook and Guide  
The “how-to” for blending active, engaged learning into any program and becoming an afterschool educator. Dozens of activities, projects, and helping strategies linked to school content, with easy-to-read K – 12 content standards, including mathematics and science. <http://afterschooled.org/>

## RESEARCH AND STANDARDS

- National Science Digital Library (<http://nsdl.org/>)  
Provides content maps connecting science concepts, standards and activities.
- National Council of Teachers of Mathematics (<http://standards.nctm.org/document/index.htm>)  
Provides the standards, content maps connecting math concepts and activities.
- Pre-Engineering K-12 (<http://www.prek-12engineering.org/>)  
Provides engineering standards by grade level and activities.

