STEM in Afterschool
Resources

CURRICULA AND PROJECT IDEAS

National Resources:

  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)
  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)
  Science curriculum designed for use during K-6th afterschool programs.

- Design Squad (http://pbskids.org/desig nsquad/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)
  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.

  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)
  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

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.