New Haven Public Schools

Educators’ Guide to STEM Programs

Winter 2012
How to Use This Guide

This guide is intended to help educators successfully increase access and exposure of students to STEM (Science, Technology, Engineering, and Math) concepts, programs, and, ultimately, careers.

This guide will:

- **Update** you about the latest figures on the importance of STEM education and our district’s efforts to bring STEM programs to students,

- **Clarify** your role in obtaining effective STEM programming for students at different age or developmental levels,

- **Direct** you through the process of screening, selecting, and funding a STEM program, and

- **Connect** you with programs for students and with professional development opportunities available in the New Haven area or accessible on-line.
STEM Education in New Haven

“Our nation’s success depends on strengthening America’s role as the world’s engine of discovery and innovation...And that leadership tomorrow depends on how we educate our students today -- especially in science, technology, engineering and math.”
President Barack Obama, September 2010

Why STEM?

All students, regardless of age, sex, cultural or ethnic background, disabilities, aspirations, or previous experience, should have the opportunity to attain high levels of excellence in the four STEM fields: Science, Technology, Engineering, and Mathematics.

When educators cultivate STEM skills, you enhance students’ intellectual development and introduce them to interests and careers they may not have previously considered. Building these STEM skills is critical to the futures of our students:

- **Job opportunity in the STEM sectors is growing.** 80% of all jobs will require some STEM skill by 2018.
- **STEM workers take home higher paychecks.** Salaries in STEM jobs have grown eight percent more than non-STEM jobs in the past 30 years, and people with a bachelor’s degree in a STEM field make approximately $500,000 more than non-STEM majors throughout their lifetime.
- **STEM skills help workers move up the career ladder.** STEM competency is considered “foundational” for upper management.

STEM Programs in NHPS

It is the District’s goal to provide quality, coordinated STEM education and programs. Success in achieving this goal will cultivate the interest and skills students need to succeed in higher education and have access to careers in STEM fields. By aligning STEM activities, programs, and curriculum to district goals and procedures, more students will succeed in STEM courses from elementary to high school and will go on to select STEM majors and careers.

Currently, New Haven students and teachers work with over 250 STEM-related programs, including competitions, summer programs, partnerships, and technology initiatives. Preliminary student indicators show that many students are already completing “gateway” STEM courses such as Algebra I and II (86%) and Chemistry (81%).

Of course, the key STEM indicator is how many students go on to STEM majors and careers. Nationally, 50% of current eighth-graders report an interest in STEM careers and studies, while only 30% of graduating seniors surveyed intend to pursue STEM studies. By increasing the number of students who persist in STEM fields, we can provide students with access to exciting careers, not just short-term jobs.
The Role of Educators

As an educator, you are critical to introducing students to STEM and fostering ongoing engagement with and dialogue about science, technology, engineering, and math.

Students need different kinds of support during different stages in their education

<table>
<thead>
<tr>
<th>Elementary School</th>
<th>Middle School</th>
<th>High School</th>
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</thead>
<tbody>
<tr>
<td>• Create interest by speaking positively about STEM fields</td>
<td>• Discuss careers and preparation with students</td>
<td>• Guide students with specific career interests to the necessary math &amp; science classes</td>
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<tr>
<td>• Build math and critical reasoning skills and connect them to STEM subject areas</td>
<td>• Encourage 'positive failure' so that students can become comfortable with challenging material</td>
<td>• Remind students that STEM skills are necessary to solving some of our world's biggest challenges</td>
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<tr>
<td>• Introduce students to a variety of STEM areas</td>
<td>• Suggest competitions and activities that inspire creativity and build intellect</td>
<td>• Connect students with mentors and practitioners from the community</td>
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This guide is intended to help all educators in New Haven choose and obtain effective, age-appropriate STEM programming to support the curricular and developmental objectives of their students.

In addition to lessons, activities, and programs that take place in the classroom or on a field trip during the school day, we encourage you to connect individual students or student teams with STEM-related programs taking place outside of school. Classroom teachers may also benefit from STEM programs relevant directly to their professional development and curriculum planning.

Support for STEM educators is available nearby and online

<table>
<thead>
<tr>
<th>For this kind of group…</th>
<th>…these kinds of programs are available</th>
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</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Professional development opportunities, curriculum resources, &amp; lesson plans and materials</td>
</tr>
<tr>
<td>Students, in school time</td>
<td>Field trips, demonstrations &amp; visitors, in-class STEM activities, school-wide events (Math Night, Science Fair)</td>
</tr>
</tbody>
</table>
A variety of programs and support are available in the greater New Haven area or online for STEM educators; a list of available programs can be found below.

What you can do: Connecting with high-quality programs

High quality STEM programs challenge students to:

21st Century Skills

<table>
<thead>
<tr>
<th>Collaborate</th>
<th>Reflect</th>
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<tr>
<td>Assess &amp; analyze information</td>
<td>Think creatively and critically</td>
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<tr>
<td>Defend the logic behind conclusions</td>
<td>Solve problems</td>
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and foster:

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<tr>
<th>Initiative</th>
<th>Self-direction</th>
<th>Accountability</th>
<th>Citizenship</th>
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As you reach out to programs to find out more and potentially invite them to work with your students, we encourage you to screen the programs to make sure they are a strong fit with your student population and curriculum. Consider covering these topics with a provider before signing up:

- What are this program’s goals? How do you know whether they have been met? Is there a formal assessment process to determine what students learned?
- What ability level is the program targeted at?
- What specific skills does the program help to build?
- What is the break-down of activities during the program (that is, how much time is spent observing, listening, creating, discussing, etc.)?
- To what extent does the program incorporate teacher/family feedback into its design and implementation?
- How successful has the program been in the past? How do you know?

What you can do: Delivering programs to educators and students
Guide to STEM Programs

Please use the following list to guide your search for the right program for you and your students. An entire list (alphabetical) of programs, websites, and descriptions follows; the abbreviations “E” (elementary school), “M” (middle school), and “H” (high school) are used to indicate at which age group the program is directed.

### List of Programs by Target Population

**Educators**
- Afterschool Alliance
- Connecticut Career Choices Digital Arts & Sciences Sequences
- CRISP Professional Development
- CT Center for Advanced Technology
- eesmarts
- Northeast Sustainable Energy Association
- Project Lead the Way
- Sony Wonder Technology Lab
- STEM Academy
- Teacher Quality Partnership (with WCSU)
- Yale New Haven Teachers Institute
- Yale Peabody Museum of Natural History
- Peabody Fellows Program
- Yale Peabody Museum of Natural History
- Teacher Workshops

**Elementary School Students**
- Dynamic Education Marvels of Science
- Nutrition Detectives

**Elementary & Middle School Students**
- Common Ground Program for Schools
- Eco-Adventure
- Leitner Family Observatory & Planetarium
- Little Scientists
- Nature’s Classroom
- Yale Peabody Summer Youth Program

**Middle School Students**
- Girls’ Science Investigations (GSI)
- Junior Solar Sprint Design & Race Competition
- Marine Science Day
- MathCounts
- Science & Math Achiever Teams (SMArT)
- Science Education Outreach Program

**Middle and High School Students**
- Connecticut Science Fair
- CPEP
- GearUp
High School Students

- ACE Mentoring Program
- CareerYale Scholars Program
- CT Junior Science & Humanities Symposium
- CRISP
- Discovery to Cure Summer Internship
- EMT Firefighting Program
- Environthon
- Greater New Haven Math League
- Health Professions Recruitment & Exposure
- Minorities in Medicine Movement

-Moody’s Mega Math Challenge
-Peabody SciCORPS
-Project Opening Doors
-Proton Energy Scholarship
-School-to-Career Internship Program
-SCSU PaCE Scholarship
-Synergy
-Yale Peabody EVOLUTIONS
-Yale Physics Olympics

Suitable/adaptable for all grade levels

- 21st Century Community Learning Centers
- CT Girls Collaborative
- CT Agricultural Station Girls in Science
- CT River Salmon Association
- CT Science Center
- Eli Whitney Museum
- FIRST Robotics
- Have Bones, Will Travel
- NHPS Science Fair
- Ocean Engineering Competition
- Odyssey of the Mind

-Schooner, Inc.
-Science Fair Mentors
-Science Olympiad
-Solar Youth
-Southern Women in Math & Science
-Family Day
-The Growing Connection
-Yale Center for Excellence in Genome
-Sciences
-Yale Peabody Museum

In addition to bringing STEM-centered programs and classroom resources created by outside providers to students, educators can also involve the entire school community (including students’ families) in school-wide events. A small sample of such event ideas includes:

-Earth Day
-Family Engineering Night
-Family Math Night
-Family Science Night

-Metric Olympics
-Pi Day
-Women in Engineering Day
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<th>Description</th>
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Program: 21st Century Community Learning Centers

Target Population: E, M, H

Program type: Students - out of school time
Out-of-school enrichment activity

Website: http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&q=320810&sdePNavCtr=|45493|#45530

Description:
Supporting community learning centers through professional development, training and networking opportunities for schools, community based organizations and after school programs. These programs provide academic enrichment opportunities during non-school hours for children, as well as literacy and other educational services to the families of participating children.
Program: ACE Mentoring Program

Target Population: H

Program type: Students - out of school time
Mentoring

Website: http://www.acementor.org/722

Description:
ACE's mission is to engage, excite and enlighten high school students to pursue careers in architecture, engineering and construction through mentoring and to support their continued advancement in the industry. Educators in more than 106 communities and 1,100 high schools across the U.S. have seen the difference ACE can make in their students' academic performance, college aspirations and career motivation. Today, more than 11,000 students take part in ACE. Working with mentors from local professional firms, they are discovering the rewarding opportunities available to them as architects, interior designers, landscape architects, engineers, construction managers and tradespeople. No school time is used; no school funds are needed. Students meet after school with dedicated mentors who guide them through engaging, hands-on projects and field trips. These activities reinforce classroom learning in math, physics, art, computer skills and other important subjects, establishing for students a direct link between curricular and career success.
**Program:** Afterschool Alliance

**Target Population:** Teachers

**Program type:** Teachers
Curricular Resource/Support

**Website:**
http://www.afterschoolalliance.org/STEMcurriculum.cfm

**Description:**
There are a plethora of high-quality curricula and programs available for use in afterschool programs. While it is not possible for us to list all the available resources, here are a few compilations of curricula, activities, and programs below that can get you started.
Program: CareerYale Scholars Program

Target Population: H

Program type: Students - out of school time
Summer Camp

Website: http://www.yale.edu/onhsa/youth_scholar.htm

Description:
The Yale summer SCHOLAR program brings 50-60 students from Hill Regional Career High School (Career HS) to live and study science for three weeks on the Yale campus. SCHOLAR provides an intensive, hands-on science curriculum in an exploratory and interactive teaching environment that emphasizes discovery, critical thinking, and problem-solving. Yale University faculty designs the curriculum with the support of teachers and advisors from Career HS, Yale graduate and professional schools, and SCHOLAR faculty. Yale students serve a vital role as teaching assistants and mentors.
Program: Common Ground Programs for Schools

Target Population: E, M

Program type: Students - in school time
Field trip

Website: http://www.nhep.com/for_schools.php

Description:
A limited number of field trips are available free or at a reduced cost to New Haven Public Schools. Please call to inquire further. Our school programs take advantage of seasons and cycles on the farm and in the forest to provide hands-on learning experiences that are aligned with state content and inquiry standards. Our programs are designed to allow kids time to grow and explore outside the classroom through problem solving, exploration and creative play.
Program: CPEP

Target Population: M, H

Program type: Students - out of school time
              Out-of-school enrichment activity

Website:
http://www.cpep.org/

Description:
CPEP was designed and implemented to address the growing need to identify, inspire and ignite the desire of under-represented youths to pursue careers in Engineering. From our humble beginnings 20 years ago, operating from one school with 40 students, CPEP has grown to represent 11 school districts, 35 schools and directly touching the lives of over 800 students each year (the indirect impact is significantly greater). While our program expanded across the state, so too has our ambition and core focus. In order to better align our programs/curriculum with the ever-increasing need for the United States to build a robust pipeline of students pursuing careers in Science, Technology, Engineering and Math, we have adopted a broader lens. We have moved from a primarily engineering focus to include the full breadth of STEM activities. Therefore, our experience has been more encompassing for our students and more appropriate for their success in the 21st Century.
Program: CRISP

Target Population: H

Program type: Students - out of school time
Internship

Website:
http://www.crisp.yale.edu/index.php/Main_Page

Description:
The Yale University/ Southern CT State University CRISP REU fellowship program provides students with the opportunity to conduct team-based interdisciplinary materials research through summer research opportunities for undergraduate students. During the course of this eight-week summer research program, students conduct research under the advisement of a university faculty mentor and postdoctoral fellows and graduate students within the research group.
Program: CRISP Professional Development

Target Population: Teachers

Program type: Teachers Professional Development

Website: https://www.southernct.edu/crisp/index.php/Professional_Development

Description:
The goal of CRISP professional development (PD) is to provide specialized training to practicing scientists and science educators at all levels including K-12 teachers, community college faculty, graduate students, post-docs and industry professionals. CRISP offers PD in a variety of ways, i.e. through coursework, workshops and curricular resources. CRISP PD workshops are offered to local science teachers and community college faculty (however, this may differ depending upon the target audience for a particular workshop). Typically, several workshops are offered each semester with the overarching theme of integrating interdisciplinary science into the classroom. The selection of workshop participants is based on an application. Typically, participation is granted on a first-apply basis. Continuing Education Units (CEUs) may be awarded to participants upon completion of the workshop.
Program: CT Agricultural Station Girls in Science

Target Population: E, M, H

Program type: Students - out of school time
Mentoring

Website: http://www.ct.gov/caes/cwp/view.asp?a=3744&q=440028&caesNav=%7C

Description:
The Community Foundation of Greater New Haven, Fund for Women and Girls Middle School Girls' Science Mentorship Program targeted to disadvantaged New Haven area middle school girls, this unique mentorship will support the science education of girls by providing them with the opportunity to experience “real world” science in actual laboratories under the mentorship of professional Scientists.
Program:        CT Career Choices Digital Arts and Sciences Sequences

Target Population: Teachers

Program type: Teachers
Curricular Resource/Support

Website:

Description:
The CCC Academy of Digital Arts and Sciences program is designed for delivery as either a contemporary sequence of courses within an existing high school course of study or as a complete high school program in an existing or new school. The tables on the webpage illustrate the sequence of required courses and electives for three program options: the 21st century context, for example, Biology in the context of Biotechnology, or Chemistry in the context of Nanotechnology.
**Program:** CT Center for Advanced Technology

**Target Population:** Teachers

**Program type:** Teachers
Curricular Resource/Support

**Website:**
http://education2.ccat.us/studentprograms

**Description:**
CCAT's Education & Training Initiative develops and implements engaging, contextual K-12 STEM programming that supports 21st century skills development, equips teachers with the tools needed to increase student participation and achievement in science and high tech content areas, and promotes training of the emergent highly-skilled workforce.
Program: CT Girls Collaborative

Target Population: E, M, H

Program type: Students - out of school time
Mentoring

Website: http://www.ngcproject.org/connecticut/index.cfm

Description: The vision of the Connecticut Girls Collaborative Project is to close the gender gap in science, technology, engineering, and mathematics (STEM) degrees and careers. This initiative will connect girls across Connecticut with STEM businesses and organizations by engaging them in collaborations that will promote new ways of thinking, new ways of sharing resources, and new solutions. The ultimate goal is to secure gender equity in aligning with the Department of Economic and Community Development to enhance Connecticut’s competitive position in the new economy and solidify the state’s reputation as a high-tech leader in innovation and productivity.
**Program:**  
CT Junior Science and Humanities Symposium

**Target Population:**  
H

**Program type:**  
Students - in school time  
Competition

**Website:**  
http://www.jshs.org/regions/conn.html

**Description:**
The Junior Science and Humanities Symposia (JSHS) Program invites high school students to submit a paper on an original research investigation in the sciences, engineering, or mathematics. By connecting talented students, their teachers, and research professionals at affiliated symposia and by rewarding research excellence, JSHS aims to widen the pool of trained talent prepared to conduct research and development vital to our nation. All students in grades 9-12 enrolled in public, private, or home schools in are eligible to participate.
Program: CT River Salmon Association

Target Population: E, M, H

Program type: Students - in school time
               Demonstrations/In-class activities

Website: http://www.ctriverwildlife.org/schools.html

Description: CRSA operates its Salmon-in-Schools Program in many Connecticut public schools. Under the program, Atlantic salmon eggs, taken from returning adult salmon or their offspring, are reared for the salmon Restoration Project in school classrooms. When the eggs hatch, the young fish, called alevin, quickly develop into fry. At this stage, they are collected and stocked at selected locations in the Connecticut River watershed as part of the overall restoration stocking program. Students from kindergarten through high school participate actively in all phases of the program, including the stocking; the program runs from January until early May.
Program: CT Science Center

Target Population: E, M, H

Program type: Students - in school time  
Field Trips

Website:  
http://ctsciencecenter.org/groups/outreach-programs.aspx

Description:  
With 150 hands-on exhibits, a state-of-the-art 3D digital theater, four educational labs, plus daily programs and events, the Connecticut Science Center offers endless exploration for children, teens and adults. Every part of science will be at a visitor’s fingertips, from Physics to Forensics, Geology to Astronomy.
Program: CT Science Fair

Target Population: M, H

Program type: Students - out of school time
Competition

Website: http://www.ctsciencefair.org/

Description:
The Connecticut Science Fair is a yearly, statewide science and engineering fair open to all 7th through 12th grade students residing, or enrolled, in Connecticut schools and several New York towns. An important objective of our program is to attract young people to careers in science while developing skills essential to critical thinking. Through science fair participation, students are encouraged to pursue independent work using proper research methods.
Program: CT Sea Grant Extension Program

Target Population: Teachers

Program type: Teachers
Professional Development

Website: http://web2.uconn.edu/seagrant/whatwedo/marineed/index.php

Description:
The Connecticut Sea Grant Education Program provides professional development for K-12 educators, curriculum consultation, resources and publications, links between educators and scientists, and opportunities for educators, K-12 students and undergraduate/graduate students.
**Program:** Discovery to Cure Summer Internship

**Target Population:** H

**Program type:** Students - out of school time
Internship

**Website:**
http://medicine.yale.edu/obgyn/research/labs/immunology/intern.aspx

**Description:**
The Discovery to Cure Summer Internship Program is for high school Juniors (who must be 16 at the start of the program). Gil Mor, MD, PhD of the Department of Obstetrics, Gynecology & Reproductive Sciences created the program in order to expose high quality students from nearby high schools and International students to Yale's laboratories and possibly open their minds to future career opportunities. Our main goal is to promote the interest in science and medicine in high school students.
Program: Dynamic Education Marvels of Science (DEMOS)

Target Population: E

Program type: Students - in school time
Demonstrations/In-school Activities

Website: www.yale.edu/demos

Description:
Yale student volunteers teach weekly science classes at local elementary schools, using engaging demonstrations and hands-on activities to teach basic scientific principles. The DEMOS group also performs science assemblies and planetarium demonstrations for local elementary schools and runs semi-annual, day-long science festivals for New Haven families.

Contact: Dwight Hall Main Office at 203-432-2420 or dwighthall@yale.edu
Program: Eco-Adventure

Target Population: E, M

Program type: Students - out of school time
Out-of-school enrichment activity

Website: http://www.cityofnewhaven.com/parks/news/media/summerCamp/summerCamp2006.pdf

Description:
New Haven’s Eco-Adventure Extreme camps are unique, challenging, safe and fun learning experiences. They include environmental activities, amazing exposures to biodiversity, and outdoor adventure activities specially tailored to the needs and abilities of the youth. We will offer the campers different experiences on three levels: physical, intellectual, and emotional, through exploration of a wide variety of urban and natural settings in the City of New Haven. Our staff-to-participant ratio allows for plenty of personal instruction, as well as careful supervision of all activities with individual attention.
Program:       eeSmarts
Target Population:  Teachers
Program type:  Teachers
                Professional development

Website:    http://www.eesmarts.com/wps/portal/eesmarts/eehome

Description:
eeSmarts is an energy efficiency and clean, renewable energy learning initiative funded by the Connecticut Energy Efficiency Fund. The vision of eeSmarts is to facilitate students' understanding of the science, math and technology related to clean, renewable energy and electricity in order to create an energy-efficient ethic among all school-age students in Connecticut. All eeSmarts workshops and lessons fully align with the Connecticut Mastery Test, the Connecticut State Science Framework, the Connecticut State Mathematics Framework and the National Science Standards.
**Program:**  Eli Whitney Museum

**Target Population:**  E, M, H

**Program type:**  Teachers
                  Professional Development

**Website:**  [http://www.eliwhitney.org/new/workshop/school-programs/schedule-a-school-program](http://www.eliwhitney.org/new/workshop/school-programs/schedule-a-school-program)

**Description:**
Over the course of a year, students in our programs build more than 70,000 projects. Choose a program from our extensive catalog to meet your curriculum needs and excite your students' talents. We have changed our format hoping to make it easier for you to find programs which suit specific grade level CT Science Framework categories. But just because a program is listed for a 3rd grade Standard doesn’t mean it isn't appropriate for another grade, or if it falls into an older grade curriculum doesn’t exclude it being done by a younger group of capable students.
Program: EMT/FireFighting Program

Target Population: H

Program type: Students - out of school time
Out-of-school enrichment activity

Website:
http://www.nhps.net/node/674

Description:
The program is seeking candidates who have a strong interest in becoming a Firefighter/ Emergency Medical Technician or students who have some other allied health career interest. Candidates need to have a good attitude, interpersonal skills, a good attendance record, and a “C” or better grade point average. This is a very challenging course that is worth two science credits.
Program: Environthon

Target Population: H

Program type: Students - in school time
              Competition

Website: http://www.ctenvirothon.org/

Description:
Envirothon is a natural resource based education program that was started in 1992 by the state’s Soil and Water Conservation Districts. High School Students work in teams led by a teacher/advisor. During the school year, teams receive curriculum materials and are invited to a series of training workshops in the Envirothon Study Areas of Soils, Aquatics, Wildlife, Forestry and a Current Environmental Issue. These workshops are presented by foresters, soil scientists, aquatic ecologists, wildlife biologists, and many others. Students really benefit from meeting people working in a broad range of environmental careers. Teachers also benefit and find the program a wonderful source of networking and professional growth for their own careers. Envirothon Team members may come from a Science Class, a Vocational Agricultural program or an after school club. Teams are also encouraged to get involved in some kind of environmental service project in their local communities such as building trails, planting trees or river buffers or restoring wildlife habitats.
Program: **FIRST Robotics**

Target Population: E, M, H

Program type: Students - in school time
               Competition

Website: [http://www.ctfirst.org/](http://www.ctfirst.org/)

Description:
Four different programs available for grade levels K-12. FIRST provides programs supporting students in all grade levels (K-12). Involvement and intensity increases as the students progress through the various programs. It is not necessary to “start at the bottom at work your way up.” Students can enter at any level, based on their current grade level. Teams may be made up of neighborhood groups, school groups, home school organizations, Girl Scouts or Boy Scouts, family members, and after school programs.
Program:  
*Gear Up*

Target Population:  
M, H

Program type:  
Students - out of school time
Scholarship

Website:  
http://www.ctdhe.org/oeo/gearup.htm

Description:  
GEAR UP in Connecticut is a partnership between the Connecticut Department of Higher Education and Bridgeport and New Haven public schools. Begun in 1999 with 7th grade students from 14 elementary and middle schools, GEAR UP now serves students in grade 7 - 12 in the following schools: Betsy Ross Arts, Career High, Clemente Middle, Cross High, Fair Haven Middle, J. Robinson Middle, Hillhouse High, Sheridan Academy and Troup Middle. Activities for students include:

- The MAAX (Maximizing Adolescent Academic eXcellence) – MAAX helps 8th grade students achieve academic excellence and learn about college.
- Saturday Academy – offers fun, hands-on learning for 7th and 8th graders and their parents in math, science, communications and computer technology.
- College Explorations Workshops – early college awareness activities offered for all 7th and 8th graders
- Transition Workshops – to help 8th graders improve study skills, select courses and get advice from high school students and counselors.
- High School Programs – designed to keep high school students on the college track through college planning, mentoring and SAT preparation (currently under development)
- Parent Activities – workshops to help parents become informed, guiding forces in their children’s education.
- Summer Programs – a wide range of activities such as fields trips, college fairs and community service.
Program: Girls' Science Investigations (GSI)

Target Population: M

Program type: Students - out of school time
Out-of-school activities

Website: www.yale.edu/physics/GSI/

Description:
GSI is a program for girls in grades 6-8 who are interested in learning more about science. The program meets for four Saturdays at Yale University during the academic year. Students have an opportunity to observe scientists, run demonstrations and participate in hands-on experiments.

Contact: Bonnie Fleming, Associate Professor, gsi_newhaven@hepmail.physics.yale.edu
Program: Greater New Haven Math League

Target Population: H

Program type: Students - in school time
               Competition

Website: n/a

Description:
Regional math competition for 10-12 grade, 18 participating local schools.
Program: Have Bones Will Travel

Target Population: E, M, H

Program type: Students - in school time
              Demonstrations/In-school Activities

Website: www.nursing.yale.edu/Community/bare-bones.html

Description: Program offered by the Yale School of Nursing to elementary, middle, and high schools in New Haven. The program aims to educate students about the marvels of the human body through creative and fun activities in order to better understand the decisions that impact their long-term health.

Contact: Linda Pellico, Assistant Professor in Nursing, at 203-737-5392 or linda.pellico@yale.edu
Program: Health Professions Recruitment and Exposure Program (HPREP)

Target Population: H

Program type: Students - out of school time
Out-of school activities

Website: http://www.yale.edu/onhsa/youth_programs.htm#academic

Description:
HPREP is a nationwide high school science enrichment program aimed at recruiting African-American, Native American, and Latino high school students into careers in the sciences and health professions. Each year over 30 New Haven high school students attend eight Saturday sessions run by Yale minority graduate and professional students. Students participate in small group discussions on various health topics within medicine and public health. A special emphasis is placed on health issues disproportionately affecting minority communities.

Contact: Yale School of Medicine Office of Multicultural Affairs at 203-785-7545
Program: Invention Convention

Target Population: E, M

Program type: Students - out of school time
Competition

Website: http://www.ctinventionconvention.org/

Description:
The Connecticut Invention Convention (CIC) is an award winning, internationally recognized, 501(c)(3) educational organization started in 1983 as part of the Connecticut Educators Network for the Talented and Gifted. The program is open to K-8 students statewide, and is designed to develop, encourage, and enhance critical thinking skills through invention, innovation and entrepreneurship. Invention provides students with a unique means to discover new skill sets and creatively apply these in real-life settings while nurturing science, technology, engineering, and mathematics (STEM). The CIC curriculum is standards-based and enables students to research, analyze and effectively focus on and solve their real-life problems. The annual convention also gives many students and parents an introduction to careers in engineering with exhibits staffed by UConn's students and professors which showcase engineering subjects, including civil, mechanical and chemical engineering – helping students discover engineering and science as real possible careers, definitely within reach. Since our inception, an estimated 250,000 children, K-8, have experienced locally driven CIC invention programs. Annually the CIC serves between 8,000 and 11,000 students in grades K - 8 across Connecticut from over 100 participating Connecticut schools. Of this number, the best 600 student inventors join us at the state convention held at the University of Connecticut.
Program: Junior Solar Sprint Design and Race Competition

Target Population: M

Program type: Students - in school time
Competition

Website: http://www.nesea.org/k-12/juniorsolarsprint/areacoordinatorsandjssareaevents/

Description:
Junior Solar Sprint is a design engineering challenge where students in fifth through eighth grade design and create model solar electric race cars. Youth can then enter competitions and be judged on the merits of the model solar electric cars.
Program: Leitner Family Observatory and Planetarium

Target Population: E, M

Program type: Students - in school time
Field Trips

Website:
www.leitnerobservatory.org

Description:
The new digital planetarium is a great place to learn about our solar system. Elementary and middle school groups are welcome to visit for the following programs. In “Day and Night,” “Earth’s Seasons” and “Our Solar System” students see the motion of the earth, moon, planets and other objects on the planetarium dome. Students also manipulate globes and lights to understand how these phenomena occur. The “Native American Sky Legends Program” introduces students to Native American stories and legends about stars, constellations and astronomical events. High school groups can visit for one of the Leitner’s popular planetarium shows and learn about what can be observed in the night sky. Contact: Heidi Herrick, Planetarium Instructor, at 203-530-6487 or heidi.herrick@yale.edu
<table>
<thead>
<tr>
<th><strong>Program:</strong></th>
<th>Little Scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target Population:</strong></td>
<td>E, M</td>
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</tbody>
</table>
| **Program type:** | Teachers  
Curricular Resource/Support |
| **Website:** | [http://www.little-scientists.com/](http://www.little-scientists.com/) |

**Description:**  
Little Scientists® is a "hands-on" approach to teaching science to young children. The goal of Little Scientists® is to excite all children about the world of science, using innovative educational techniques. Coupling interactive projects, entertaining demonstrations and simple experiments with children’s natural curiosity, Little Scientists® introduces children to the thrill of scientific discovery.
**Program:** Marine Science Day

**Target Population:** M

**Program type:** Students - in school time
Field trip

**Website:**
http://lisfoundation.org/index.php

**Description:**
More than 270 students in fifth through eighth grade gathered for the annual Marine Science Day at UConn’s Avery Point campus on May 19. Hosted by the Long Island Sound Foundation, in conjunction with the Connecticut Association of Schools, the event aimed to educate students about Long Island Sound and the field of marine science.
Program: MathCounts

Target Population: M

Program type: Students - in school time
       Competition

Website: www.yale.edu/mathcounts

Description:
Mathcounts is a math-enrichment program designed to increase enthusiasm for and enhance achievement in middle school mathematics throughout the United States. Yale students travel weekly to New Haven public middle schools to help students solve Mathcounts problems, which cover topics found in the standard middle-school math curriculum and contain a creative flair to challenge and excite students. Schools participate in team competitions at the local, state, and national levels. The Yale Undergraduate Mathcounts actively collaborates with the New Haven Public Schools mathematics department, the Connecticut Society of Professional Engineers, and the Mathcounts Foundation.

Contact: Dwight Hall Main Office at 203-432-2420 or dwighthall@yale.edu
Program:                          Minorities in Medicine Movement

Target Population:               H

Program type:                    Students - out of school time
                                 Mentoring

Website:                         www.yale.edu/mmm/

Description:
Minorities in Medicine Movement promotes diversity in medical professions by encouraging youth interest in medicine. Volunteers strive to inspire and encourage youth from racial/ethnic groups that are underrepresented in medicine, provide these students with resources, practical information, and exciting experiences in the medical field that will nurture their interest in medicine and help them achieve their particular goals. Activities are rooted in mentoring relationships and will include field trips, lectures, panels, and workshops led by physicians, medical students, researchers, and other health professionals and medically-minded individuals.

Contact: Dwight Hall Main Office at 203-432-2420 or dwighthall@yale.edu
Program: Moody’s Mega Math Challenge

Target Population: H

Program type: Students - out of school time

Competition

Website: http://m3challenge.siam.org/

Description:
Moody’s Mega Math Challenge (M3 Challenge) is an applied mathematics competition for high school students. Winners receive scholarships totaling $115,000 for continuing education. Requires team to register and then compete on designated M3 Challenge weekend.
Program: Nature’s Classroom

Target Population: E, M

Program type: Students - in school time
Field Trip

Website:
http://www.naturesclassroom.org/

Description:
The process begins when teachers volunteer to bring their students to Nature’s Classroom. Most schools attend our 5 day program, staying at one of our 15 sites in New York and New England.

Having spent a week at Nature’s Classroom, living and learning together, students develop a sense of community, a confidence in themselves and an appreciation for others that carries over to the school community.
<table>
<thead>
<tr>
<th>Program:</th>
<th>NHPS Science Fair</th>
</tr>
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<tr>
<td>Target Population:</td>
<td>E, M, H</td>
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<tr>
<td>Program type:</td>
<td>Students - in school time</td>
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<tr>
<td></td>
<td>Competition</td>
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<tr>
<td>Website:</td>
<td><a href="http://nhsciencefair.org/">http://nhsciencefair.org/</a></td>
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</tbody>
</table>

**Description:**
The New Haven Science Fair Program is truly a partnership involving businesses, universities, associations, foundations, and private citizens, working with the public schools’ teachers, students, and administrators, and the students' parents. The goal of the program is to work with children and teachers from Pre-K through Grade 12, to help them carry out investigative hands-on science fair projects, in order to promote skills in critical thinking, science process and communication.
Program: Northeast Sustainable Energy Association

Target Population: Teachers

Program type: Teachers
Curricular Resource/Support

Website: http://www.nesea.org/k-12/curricularunits/

Description:
Curricular units and materials for clean/green energy, transportation
Program: Nutrition Detectives

Target Population: E

Program type: Students - in school time
Demonstrations/In-class activities

Website: http://www.davidkatzmd.com/nutritiondetectives.aspx

Description:
Nutrition Detectives is an innovative program for elementary school children. It shows them "5 clues" to read food labels and detect marketing deceptions while learning to identify and choose healthful foods. The program is novel, engaging, and efficient, imparting crucial information in minimal time. It can be presented using either a DVD video presentation (with Dr. Katz teaching students in a "magical" classroom setting), or as a PowerPoint slide show. The presentation is followed by a hands-on activity in which children apply their "detective" skills with real food packages.
Program: Ocean Engineering Competition

Target Population: E, M, H

Program type: Students - out of school time Competition

Website: http://www.materover.org/main/

Description:
Activities include canoeing, kayaking, white water rafting, sailing, orienteering, hiking & nature interpretation, climbing wall, rock climbing, mountain biking, introduction to scuba diving, ropes & challenge course, and much more. A swimming test is required for acceptance in the Eco-Adventure Extreme camp.
Program: Odyssey of the Mind

Target Population: E, M, H

Program type: Students - in school time
             Competition

Website: http://www.odysseyofthemind.com/

Description:
Odyssey of the Mind is an international educational program that provides creative problem-solving opportunities for students from kindergarten through college. Team members apply their creativity to solve problems that range from building mechanical devices to presenting their own interpretation of literary classics. They then bring their solutions to competition on the local, state, and World level. Thousands of teams from throughout the U.S. and from about 25 other countries participate in the program.
Program: Peabody Sci.CORPS

Target Population: H

Program type: Students - out of school time
               Internship

Website: www.yale.edu/peabody/education/afterschool.html

Description:
Sci. CORPS (Science Career Orientation and Readiness Program for Students) is a new program component serving EVOLUTIONS program veterans. Participants are trained as exhibit interpreters and enter an employment ladder that leads to paid opportunities in the Peabody Museum.

Contact: Jamie Alonzo, Coordinator, at 203-432-6577 or peabody.afterschool@yale.edu
**Program:** Project Lead the Way

**Target Population:** Teachers

**Program type:** Teachers
Curricular Resource/Support

**Website:**
http://www.pltw.org/educators-administrators/educators-administrators-overview

**Description:**
The PLTW Innovation Zone (aka the classroom) is an engaging and thought-provoking place, where students develop critical thinking skills through hands-on project-based learning, preparing them to take on real-world challenges. Students will have the opportunity to create, design and build things like robots and cars, applying what they are learning in math and science to the world’s grand challenges.
Program: Project Opening Doors

Target Population: H

Program type: Students - in school time
Curricular Resource/Support

Website:
http://www.projectopeningdoors.org/

Description:
Two schools - Co-op and Wilbur Cross - have used this program that supports students who are taking AP classes. For the second year in a row, Connecticut high school students participating in Project Opening Doors (POD) have shown impressive results in their Advanced Placement (AP) test scores. The number of passing scores of POD students, especially minority students, have significantly improved the overall AP test score statistics for the entire state. POD has increased the number of passing scores in Advanced Placement (AP) math, science, and English exams by students in 19 Connecticut high schools, according to the 2010 Advanced Placement results released by the College Board.
Program: Proton Energy Scholarship

Target Population: H

Program type: Students - out of school time Scholarship

Website: http://www.protononsitescholarship.com/about.asp

Description: Proton OnSite seeks to fuel the next generation of scientific innovation by recognizing and rewarding high school seniors who demonstrate outstanding achievement, excellence and promise in the fields of science and technology, and who plan to pursue further education in these fields. Each year, Proton OnSite selects from a field of applicants to determine who will be awarded undergraduate scholarships. The Proton OnSite Scholarship program is only available to U.S. citizens.
Program: School-to-Career Internship Program

Target Population: H

Program type: Students - out of school time Internship

Website: http://www.ynhh.org/community-health/career.aspx

Description:
YNHH provides internships for high school juniors and seniors attending Wilbur Cross, Hillhouse, Metropolitan and Career Regional high schools. The program consists of a 16-week session in the spring semester followed by a 6-week summer session.
**Program:** Schooner, Inc.

**Target Population:** E, M, H

**Program type:**
- Students - out of school time
- Out-of-school enrichment activity

**Website:**
http://www.schoonerinc.org/EducationPrograms.htm

**Description:**
Schooner Inc / CT Coastal Classrooms offers environmental education programs to schools throughout Connecticut. All programs are correlated to the Connecticut Curriculum Frameworks for Science ensuring that they supplement and enhance topics covered in the traditional classroom.
Program:  Science and Math Achiever Teams (SMArT)

Target Population:  M

Program type:  Students - out of school time
               Mentoring

Website:  www.yale.edu/prgsmart

Description:
SMArT is a mentoring program which pairs Yale student volunteers with New Haven Public School students in grades 5-8. Participants meet once a week with their mentor to work on a math or science project of their choice. At the end of each semester, the students’ projects are displayed at the Science Expo open house, to which the entire community is invited. SMArT also organizes at least one field trip per semester.

Contact: Dwight Hall Main Office at 203-432-2420 or dwighthall@yale.edu
Program: Science Education Outreach Program

Target Population: M

Program type: Students - in school time
Demonstrations/In-class activities

Website:
www.seop.yale.edu

Description:
SEOP brings Yale graduate students and post-doctoral fellows into New Haven public school 7th grade classrooms to carry out hands-on genetics projects for middle school students. Its aim is to teach students about DNA and genetics, enhance students’ enthusiasm for science, provide interactions with scientists to demystify stereotypes, and provide the Yale students an opportunity to share their love of science and develop a spirit of community service.

Contact: Paula Kavathas, Professor Laboratory Medicine, Genetics, and Immunobiology, at 203-785-6223 or paula.kavathas@yale.edu
**Program:** Science Fair Mentor

**Target Population:** E, M, H

**Program type:** Students - out of school time
Mentoring

**Website:**
http://nhsciencefair.org/index.php?option=com_content&task=view&id=1&Itemid=1

**Description:**
Mentors from local universities and industries work with students in grades K-12. Some mentors assist as classroom mentors, working with elementary teachers and their classes (PreK-4), while others guide individual students or teams from grades 5 through 12.
Program: Science Olympiad

Target Population: E, M, H

Program type: Students - in school time

Competition

Website:
http://soinc.org/

Description:
Science Olympiad comes in many shapes and sizes to fit all your needs. At the K-6 level, try an Elementary Science Olympiad (ESO) program, which can come in the form of a competitive tournament, a hands-on science Fun Day or an expert-filled Science Olympiad Fun Night. In grades 6-12, Science Olympiad functions much like a football or soccer team, requiring preparation, commitment, coaching and practice throughout the year. Each school-based team is allowed to bring 15 students who cross-train for a variety of events in their skill set, but some school clubs and boast more than 75 members, allowing for a rich apprentice and mentoring system for all involved.
**Program:**  
SCSU PaCE Scholarship

**Target Population:**  
H

**Program type:**  
Students - out of school time Scholarship

**Website:**  
http://www.southernct.edu/pathways/

**Description:**  
The PAcE program provides scholarships to students who major in chemistry, biology, computer science, earth science, mathematics, or physics - including our engineering concentration. In addition, we offer forensics and environmental science minors, with a major in one of the disciplines listed above.
Program: Solar Youth

Target Population: E, M, H

Program type: Students - out of school time
Out-of-school enrichment activity

Website: http://solaryouth.org/solar-youth-programs

Description:
Solar Youth, Inc. is a non-profit organization providing opportunities for young people to develop a positive sense of self and connection and commitment to others through programs that incorporate environmental exploration, leadership and community service.
Program: Sony Wonder Technology Lab

Target Population: Teachers

Program type: Teachers
Curricular Resource/Support

Website: http://wondertechlab.sony.com/sg-educators.html

Description: Discover unique ways to integrate technology into your curriculum with professional development opportunities and educational resources.
Program: Southern Women in Math and Science Family Science Day

Target Population: E, M, H

Program type: Students - out of school time
Out-of-school enrichment activity

Website: http://www.southernct.edu/grad/events/familyscienceday_8464/

Description:
Participate in hands-on activities and demonstrations. In chemistry, take part in magic demonstrations, arts and crafts and learn how to make your own "super shrinkers"! In biology, learn about the human body as you take a close-up look at bones and your own cells and tissues! Do experiments and help research scientists extract DNA! Learn about plant anatomy from items found in your own refrigerator. In physics, learn about acceleration, vibration, buoyancy and electromagnetism! Observe low-temperature phenomena and electron microscopy!
Program: STEM Academy

Target Population: Teachers

Program type: Teachers
Professional Development

Website: http://www.stem101.org/

Description:
The STEM Academy is a national non-profit status organization dedicated to improving STEM literacy for all students. We represent a recognized national next-generation high impact academic model. The practices, strategies, and programming are built upon a foundation of identified national best practices which are designed to improve under-represented minority and low-income student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates and improve teacher and principal effectiveness. The STEM Academy offers on-site instructor, administration and career counselor training designed to bolster performance and increase student enrollment. Our curriculum development team which consists of education professionals from the fields of science, technology, engineering, mathematics and administration will consult your school on successful implementation strategies to cultivate a cohesive STEM learning environment for students. Teachers and students use the same tools utilized by industry professionals in engineering, architecture, robotics, electronic, material science and bio-technology fields with an emphasis on sustainability.
Program: Synergy

Target Population: H

Program type: Students - in school time
Demonstrations/In-class Activities

Website:
www.yale.edu/synergy

Description:
Synergy aims to both teach science and to make it relevant by introducing modern research on an understandable level. Synergy connects high school science curricula to research done by Yale students. By providing a connection to contemporary research as peers to high school, Synergy volunteers cultivate a long-term interest in science interest.

Contact: Dwight Hall Main Office at 203-432-2420 or dwighthall@yale.edu
**Program:** Teacher Quality Partnership (with WCSU)

**Target Population:** Teachers

**Program type:** Teachers
Professional Development

**Website:**
http://www.wcsu.edu/biology/wistr_home.html

**Description:**
Science teachers of Grades 6-12 have been selected from school systems in Norwalk, New Haven, and Danbury, Connecticut to participate in the inaugural year of WISTR. Participating teachers will attend a six-day summer workshop presented by the science faculty of WestConn. In conjunction with the faculty, teachers will develop and implement a year-long science research project, along with associated teaching pedagogy.
Program: The Growing Connection

Target Population: E, M, H

Program type: Students - in school time
               Demonstrations/In-class activities

Website: http://www.thegrowingconnection.org/Site/Welcome.html

Description:
The Growing Connection links people and cultures in a revolutionary campaign that introduces low-cost water efficient and sustainable food growing innovations hand in hand with access to technology and information via existing and emerging technologies. It provides a sound educational foundation, and offers hundreds of families, both in America and abroad, a concrete opportunity to earn income and climb out of desperation. Perhaps most important, The Growing Connection engages people – a network of committed individuals - in an elegant solution to one of man’s fundamental challenges. How does it work? School gardening programs and community gardens around the world grow vegetables in an EarthBox system that becomes a common growing platform for all participants. Students grow food, conduct horticultural experiments and share their lessons and experiences with each other using IT connectivity. Through modern IT installations, The Growing Connection participants in a number of countries are directly linked. And importantly, they are also connected to sources of vital information and advice on growing food. Those once the most isolated can now grow, learn, and chose their own opportunities and destinies.
Program: UCONN Gear Up

Target Population: M, H

Program type: Students - out of school time

Website: http://www.cap.uconn.edu/gearup.html

Description:
The University of Connecticut, Gear-Up Program is designed to increase student academic achievement to foster completion of high school and ensure access to post secondary education through a partnership with the New Haven School District. The Gear-Up Program and the New Haven School District are committed to a collaborative partnership in the advancement of teaching and learning methodology at the middle school and high school levels. The Gear-Up Program and the New Haven School District are committed to a collaborative partnership in the advancement of teaching and learning methodology at the middle school and high school levels.
The UConn Gear-Up Program provides services commencing in grade 6 and throughout the student’s high school career. Gear-Up participants are provided with services such as: Tutoring, mentoring, financial aid information, college preparation workshops, college tours, career exploration and summer enrichment program.
Program: Ulysses S. Grant Foundation

Target Population: M

Program type: Students - out of school time
Summer Camp

Website: http://www.yale.edu/usgrant/

Description:
The Ulysses S. Grant Foundation is an academic summer program for talented and motivated middle school students from New Haven. Since 1953, U.S. Grant has drawn on the experience and enthusiasm of Yale undergraduates to challenge students so they can acquire the academic preparation and skills they will need to enter and succeed in college and excel in their current school environment. The program is designed for bright students who might have limited opportunities and resources to participate in academic enrichment activities. U.S. Grant offers a six-week summer program on the Yale University campus for New Haven public and parochial middle school students. Each morning, in small, single-grade classes of 8-15 students, Yale undergraduates teach classes of their own design to challenge and excite their students. In Humanities classes, students study history and write speeches, read and discuss poetry and do creative writing of their own. In Investigations classes, students develop their problem-solving skills through fun, hands-on projects in the natural and social sciences. In the afternoon, students participate in electives and clubs that offer them the opportunity to learn in a more relaxed environment with students from other grades. Typical afternoon activities include sports and games, creative classes in music and the performing arts, debate and mock trial and a book club. In addition, students enjoy a variety of local and regional field trips.
Program: Yale Center for Excellence in Genome Sciences
           Yale Center for Genomics and Proteomics

Target Population: E, M, H

Program type: Students - out of school time
              Field Trips

Website: http://cgp.yale.edu

Description:
The Centers offer tours and introductory lessons in genomics and proteomics to Greater New Haven students of all ages and their teachers. Lessons include lectures from Yale scientists and fun lab activities, such as having the student isolate their own DNA and learn about state-of-the-art biotechnology. The Center works with the EVOLUTIONS (see below), an after school program through the Yale Peabody Museum of Natural History and other Yale sponsored K-12 science mentoring programs.

Contact: Nancy Kerk, Coordinator for Yale Corporate Program in the Sciences and Administrative Director for Yale Center for Genomics and Proteomics, at 203-432-8060 or nancy.kerk@yale.edu
<table>
<thead>
<tr>
<th><strong>Program:</strong></th>
<th><strong>Yale New Haven Teachers Institute</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target Population:</strong></td>
<td>Teachers</td>
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</table>
| **Program type:**  | Teachers  
Professional Development |

**Website:**  
[http://www.yale.edu/ynhti/brochures/A1/program.html](http://www.yale.edu/ynhti/brochures/A1/program.html)

**Description:**  
The Yale-New Haven Teachers Institute® is an educational partnership between Yale University and the New Haven Public Schools designed to strengthen teaching and learning in local schools and, by example and direct assistance, in high-need schools around the country. Through the Institute, Yale faculty members and New Haven school teachers work together in a collegial relationship. The Institute is also an interschool and interdisciplinary forum for teachers to collaborate on new curricula. Each participating teacher becomes an Institute Fellow, studies the seminar subject, and prepares a curriculum unit on that subject to be taught the following year. Teachers have primary responsibility for identifying the subjects the Institute addresses.
Program: Yale Peabody EVOLUTIONS

Target Population: H

Program type: Students - in school time
Afterschool

Website: www.yale.edu/peabody/education/afterschool.html

Description:
EVOLUTIONS (EVOking Learning and Understanding Through Investigations Of the Natural Sciences) is an after school club for New Haven and West Haven high school students. It places a primary focus on college preparation, science literacy, and transferable skills development, and student members receive academic credit at their schools for participating. Annual projects include the mounting of an exhibition and student-produced videos intended to teach science concepts to elementary-aged students. Students also have the opportunity to participate in field trips to regional science centers in addition to an annual college visitation trip.

Contact: Jamie Alonzo, Coordinator, at 203-432-6577 or peabody.afterschool@yale.edu
Program:          Yale Peabody Museum

Target Population:     E, M, H  

Program type:  Students - in school time
Field Trips

Website:  
www.peabody.yale.edu/education

Description:
The Peabody Museum of Natural History at Yale University opens a window of discovery into our world’s natural heritage—its flora, fauna, geology and people. Each year, the Peabody Museum provides educational programs on biology, paleontology, geology, ancient civilizations and social studies to more than 30,000 students, elementary through college, from Connecticut, Massachusetts, New York and Rhode Island. All programs draw on the Museum’s exhibits to meet the increasingly sophisticated needs of science and social studies education.

Hands-on specimens are offered where possible.

Contact: Public Education Department at 203-432-3755 or peabody.education@yale.edu
**Program:** Yale Peabody Museum of Natural History Peabody Fellows Program

**Target Population:** Teachers

**Program type:** Teachers
Professional Development

**Website:**
www.peabody.yale.edu/education/fellows

**Description:**
Yale Peabody Museum of Natural History Peabody Fellows Program This professional development program offers elementary, middle, and high school teachers innovative curricula and hands-on, inquiry-based learning methods that link biodiversity with Connecticut’s life and earth science standards. Participants attend a one-week teacher institute and receive a stipend, CEUs from Yale University, use of Museum specimens and ongoing support from the Peabody’s educators. The Fellows program covers varied content areas for different grades. All teachers are welcome to apply for this yearly program, depending upon grade level.

Contact: Mary Anderson, Community Liaison, at 203-432-5715 or mary.anderson@yale.edu
Program: Yale Peabody Museum of Natural History Teacher Workshops

Target Population: Teachers

Program type: Teachers
Professional Development

Website:
www.yale.edu/peabody/education/index.html

Description:
The Yale Peabody Museum offers many professional development opportunities for in-service and pre-service teachers, ranging from afternoon workshops to weeklong summer institutes. Topics include anthropology, archaeology, astronomy, biology and geology. Curriculum units developed by participants are published by the Yale Peabody Museum Public Education Department.

Contact: Yale Peabody Museum Education Office on 203.432.3775 or peabody.education@yale.edu
Program: Yale Peabody Summer Youth Programs

Target Population: E, M

Program type: Students - out of school time
Summer Camp

Website: 
www.yale.edu/peabody/events/camps.html

Description:
The Yale Peabody Museum of Natural History has a wide variety of fun and educational summer camps available for students entering grades 2-9. All programs include behind-the-scenes visits to the Museum's exceptional collections as well as field trips. A number of full and partial need-based scholarships are available to qualified participants.

Contact: Yale Peabody Museum Events Office at 203-432-6466 or peabody.events@yale.edu
Program: Yale Physics Olympics

Target Population: H

Program type: Students - in school time
             Competition

Website: www.yale.edu/physics/physics-olympics/index.html

Description:
The theme of the annual Yale Physics Olympics, a competition open to high schools across the region, is “Physics is fun!” Its aim is to have participants enjoy themselves while applying basic ideas from physics in the practical context of a competition. The event occurs on a Saturday in October and takes the form of a pentathlon, consisting of five 40-minute events. Each event is a task or simple experiment, which the students perform as a team. Teams are ranked based on the accuracy of their results or measurements in the experiments and prizes are awarded to the winning teams. There is no registration fee, and all high schools are welcome to apply. However, because of space limitations, there is a limit of 50 teams that can be selected to participate on a first-come basis.

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