



I TEST E-News

Innovative Technology Experiences for Students and Teachers (I TEST)

Summer 2010

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What's new

COMPUTATIONAL THINKING FOR YOUTH – WHITE PAPER

The I TEST Small Working Group on Computational Thinking (CT) has just completed its White Paper titled: Computational Thinking for Youth. The paper aims to describe what computational thinking looks like when practiced by youth in I TEST and other NSF funded programs and how educators can support growth in computational thinking. It shares examples of CT as observed in middle school projects. It also shares observations in the form of a model that describes three stages that youth appear to progress through as their computational thinking skills evolve. View the paper at <http://itestlrc.edc.org/resources/computational-thinking-youth-white-paper>.

Recent conference presentations

I TEST projects presented at the following conferences, click the links below to view presentations:

NATIONAL AFTERSCHOOL ASSOCIATION (NAA)

April 19-21, 2010 – Washington DC

View presentations at <http://itestlrc.edc.org/itest-national-afterschool-association-naa-convention-2010>

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION (AERA)

April 30-May 4, 2010 - Denver

View presentations at <http://itestlrc.edc.org/itest-american-educational-research-association-aera-annual-meeting-2010>

SOCIETY FOR INFORMATION TECHNOLOGY & TEACHER EDUCATION (SITE)

March 29-April 2 in San Diego

View presentations at <http://itestlrc.edc.org/itest-society-information-technology-teacher-education-site-conference-2010>

INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION (ISTE)

June 27-30, 2010 - Denver

View the presentations at <http://itestlrc.edc.org/itest-international-society-technology-education-iste-conference-2010> or email the information to Cynthia Newson at cnewson@edc.org.

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THREE COUNTY GIRLS RECOGNIZED FOR TECHNOLOGY ACHIEVEMENTS: NATIONAL AWARD AIMS TO ENCOURAGE TECH-SAAVY WOMEN

Source: Santa Cruz Sentinel | By Romain Fonsegrives | June 2010

WEBCAST ARCHIVE

- [OUT-OF-SCHOOL TIME STEM: BUILDING EXPERIENCE, BUILDING BRIDGES REPORT](#)
- [DESIGN SQUAD – DESIGN COMPETITION](#)
- [NATIONAL LAB DAY – VIDEO CONTEST](#)
- [VISIT THE MIDDLE SCHOOL MATH & SCIENCE PORTAL](#)

Contact Us

<http://itestlrc.edc.org/contact>

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<http://itestlrc.edc.org>

About ITEST

* The ITEST program was established by the National Science Foundation in direct response to current concerns and projections about the growing demand for professionals and information technology workers in the U.S. and seeks solutions to help ensure the breadth and depth of the STEM workforce.

Learn about the program at

<http://itestlrc.edc.org/about-itest-lrc>

ITEST Facebook

<http://tinyurl.com/2alv9z7>

ITEST Twitter

http://twitter.com/ITEST_LRC

Java, PHP, C++ -- while these puzzling programming languages keep most of us at bay, they fascinate Damon "Chizu" Kawamoto, Idzel Cano and Brianna Flores. Kawamoto, 16, Cano, 14 and Flores, 14, are among 25 talented Bay Area girls who will be honored by . . . [Read more](#).

Read about the project: Animando Estudiantes con Tecnologia at <http://itestlrc.edc.org/animando-estudiantes-con-tecnologia-aet-encouraging-students-field-information-technology>.

WHS GIRLS EARN NATIONAL RECOGNITION FOR THEIR TECH KNOWLEDGE

Source: Register Pajaronian | May 2010 | By: Todd Guild

In a packed classroom at Macquiddy Elementary School on Monday a group of fifth-grade students were busy at individual workstations, each learning the essentials it takes to operate a computer and eventually to design their own web page. For Watsonville High School freshmen Idzel Cano and Brianna Flores, who were helping with the instruction, teaching the lessons brought closure to a circle that began when they themselves learned computer basics as sixth-graders. [Read more](#).

Read about the project: Animando Estudiantes con Tecnologia at <http://itestlrc.edc.org/animando-estudiantes-con-tecnologia-aet-encouraging-students-field-information-technology>.

STUDENTS TO LAUNCH WEATHER BALLOONS IN NORTHWESTERN MINNESOTA

Source: MinnPost.com | By Sharon Schmickle | June 2010

If you're watching northwestern Minnesota's sky at just the right time on Wednesday morning, you could see the launch of a research project by students in one of Minnesota's most interesting science education efforts. [Read more](#). View a video about the program narrated by former Vice President Walter Mondale:

<http://www.extension.umn.edu/Whiteearth/reachforsky.html>.

Read about the project: Reach for the Sky at <http://itestlrc.edc.org/reach-sky-integrating-technology-stem-outcomes-american-indian-youth>.

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SCIENCE MUSEUM OF MN 'INVENTION CREW' PAVES WAY FOR FUTURE ENGINEERS

Cash-strapped school districts struggle to come up with ever-changing demands for technology education. Increasingly, schools are developing partnerships to meet the demand.

Students interview and are actually hired by the Science Museum for the Invention Crew, which this year wrote and won a grant for a project they've designed and built. [Read more](#).

Read about the project: Invention, Design, Engineering and Art Cooperative (IDEA) at <http://itestlrc.edc.org/invention-design-engineering-and-art-cooperative-idea>.

PULSAR SEARCH COLLABORATORY ARTICLE IN ASTRONOMY EDUCATION REVIEW

Volume 9, Issue 1, April 2010. The Pulsar Search Collaboratory (PSC) (NSF #0737641) is a joint project between the National Radio Astronomy Observatory and West Virginia University designed to interest high school students in science, technology, engineering, and mathematics related

career paths by helping them to conduct authentic scientific research. Click [here](#) to view the article.

Read about the project: The Pulsar Search Collaboratory (PSC) at <http://itestlrc.edc.org/pulsar-search-collaboratory>.

Opportunities

INFORMAL SCIENCE EDUCATION (ISE) SOLICITATION

Preliminary Proposal Due Date (required): July 22, 2010 except CRPA proposals (*which do not require preliminary proposals*)

Full Proposal Deadline: December 07, 2010 except CRPA proposals (*which do not have deadlines*)

Synopsis of Program: The ISE program supports innovation in anywhere, anytime, lifelong learning, through investments in research, development, infrastructure, and capacity-building for STEM learning outside formal school settings. See the full text of this solicitation for further information.

<http://www.nsf.gov/pubs/2010/nsf10565/nsf10565.htm>

ADVANCED TECHNOLOGICAL EDUCATION (ATE)

Preliminary Proposal Due Date: April 22, 2010*

Full Proposal Deadline (due by 5 p.m. proposer's local time): October 21, 2010

*Preliminary proposals are **optional**, but strongly recommended. See the full text of this solicitation for further information.

<http://www.nsf.gov/pubs/2010/nsf10539/nsf10539.htm>

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WHY SO FEW? WOMEN IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS - NGCP APRIL **WEBCAST ARCHIVE**

Tuesday, April 27, 2010

Learn from eight recent research findings profiled in the new report from this American Association of University Women (AAUW). Read more; view the webcast archive, presentation link and how to get the report at

<http://itestlrc.edc.org/ngcp-april-2010-webcast-archive-why-so-few-women-science-technology-engineering-and-mathematics>.

OUT-OF-SCHOOL TIME STEM: BUILDING EXPERIENCE, BUILDING BRIDGES REPORT

Trends, Questions, and Findings from the Field - June 2010

This report reviews patterns, challenges, and questions developing in the field of out-of-school-time (OST) science, technology, engineering and mathematics (STEM) programs by drawing on the efforts of some two dozen federally funded programs that participated and presented their work at a conference held in Washington, DC in October of 2009. View the report at

<http://itestlrc.edc.org/resources/out-school-time-stem-building-experience-building-bridges-report>.

DESIGN SQUAD – DESIGN COMPETITION

PBS' Design Squad is offering kids at home a chance to get in on the action:

the 2010 Trash to Treasure Competition challenges kids (ages 5 – 19) to take everyday discarded or recycled materials and re-engineer them into functional products. Three grand-prize winners will win a trip to Boston to see their designs built and will appear on the TV show and Web site. 25 finalists will also be featured on the Web site. Find out more and enter online at <http://pbskids.org/designsquad/contest/index.html> from April 5 to September 5, 2010.

NATIONAL LAB DAY – VIDEO CONTEST

National Lab Day is more than just a day. It's a nationwide initiative to build local communities of support that will foster ongoing collaborations among volunteers, students and educators. National Lab Day is sponsored by NSTA, ACS, MacArthur Foundation, Hiday Foundation, NIH, and NSF. Read more NLD and a find out about a video contest for schools at <http://www.nationallabday.org/>

VISIT THE MIDDLE SCHOOL MATH & SCIENCE PORTAL

The Middle School Portal 2: Math and Science Pathways (MSP2) project supports middle grades educators with high-quality, standards-based STEM resources and promotes collaboration and knowledge-sharing among its users. Educators use MSP2 to increase content knowledge in science, mathematics, and appropriate pedagogy for youth ages 10 to 15. Visit MSP2 at: <http://www.msteacher2.org>

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The ITEST Learning Resource Center
