

## **ITEST E-News**

Innovative Technology Experiences for Students and Teachers (ITEST)

### Fall 2010

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### What's new

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### **2010 ITEST AWARDS ANNOUNCED**

Learn about the newly awarded projects at <a href="http://itestlrc.edc.org/itest-projects">http://itestlrc.edc.org/itest-projects</a>. Once on the page, click on the attachment, 2010 New ITEST Awards, below the map. We will continue to add to this document as new awards are announced.

### WEBINAR ARCHIVE | AFTERSCHOOL RESEARCH AGENDA CONVENING

This follow-up webinar shared results from the gathering including an array of recommendations generated by attendees to advance research in STEM content and career exploration. Access the archive at http://go.edc.org/itest-afterschool-convening-webinar-archive.

### Mark your calendar

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ITEST PROGRAM FINDINGS ON YOUTH MOTIVATION, INTEREST, AND IDENTITY AS IT RELATES TO STEM CAREER DEVELOPMENT | WEBINAR | NOVEMBER 4, 2010 | 2:00 – 3:00PM ET

Join us to hear from ITEST projects working across the U.S. and learn specific frameworks for fostering and assessing youth motivation and STEM career interest.

This webinar will discuss recent developments in theory and measurement of youth interest in STEM careers. The purpose of the webinar is to share Principal Investigator knowledge of measurement techniques, analysis problems, and theories of youth motivation. The participants will discuss active strategies used in current ITEST projects seeking to increase motivation and STEM career development.

#### WEBINAR ACCESS

Webinar link: <a href="http://www.learningtimes.net/itestwebcasts.html">http://www.learningtimes.net/itestwebcasts.html</a>

Toll free: 1-888-450-5996 Local: 1-719-955-1371 Participant Access Code: 424447#

THIS WEBINAR WILL BE RECORDED AND ARCHIVED.

### **Conferences**

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Wireless EdTech Conference 2010  $\mid$  October 29th, 2010  $\mid$  Westin City Center  $\mid$  Washington, DC

#### **Neurological Disorders**

• NCSU researchers build 'STEM Teams' for rural areas

#### Resources

- Next ITEST Solicitation
- <u>Preparing the Next Generation</u> of STEM Innovators
- Prepare and Inspire: K-12
   Education in Science,
   Technology, Engineering, and
   Math (STEM) for America's
   Future
- E-News from the National Girls Collaborative Project (NGCP)
- DRLnet websites

### **Contact Us**

http://itestlrc.edc.org/contact

#### Web

http://itestlrc.edc.org

#### **ITEST Facebook**

http://go.edc.org/Facebook-National-ITEST-STEM-LRC

### **ITEST Twitter**

http://twitter.com/ITEST\_LRC

### **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 <a href="http://itestlrc.edc.org/about-itest-lrc">http://itestlrc.edc.org/about-itest-lrc</a>

For registration and further information, please follow this link: http://wirelessedtech.com/

### STEMTECH: OCTOBER 31-NOVEMBER 3, 2010, ORLANDO FL

The League for Innovation is proud to announce the first annual STEMtech conference! (<a href="http://www.league.org/stemtech/">http://www.league.org/stemtech/</a>). STEMtech is an interactive learning experience with a strong focus on STEM disciplines – science, technology, engineering, mathematics – in general education and workforce training and in technology use across the institution. Visit the LRC website for information on ITEST presentations at

http://itestlrc.edc.org/news and events/itest-stemtech-conference-2010.

## AMERICAN EVALUATION ASSOCIATION – EVALUATION 2010 ANNUAL CONFERENCE

**NOVEMBER 10-13, 2010 | SAN ANTONIO, TEXAS | GRAND HYATT SAN ANTONIO** The ITEST program will be represented in at least two different sessions:

- The ITEST LRC will present findings with The Evaluation Center at Western
  Michigan University from the Evaluation Capacity Building Needs Assessment
  in a paper titled, <u>Evaluation Learning Needs</u>, <u>Assets</u>, <u>and Interests of National Science Foundation (NSF) Principal Investigators and Evaluators</u>
- Evaluators and a PI from five ITEST Projects will share their experiences engaging and working with stakeholders in evaluation in, <u>Positionality</u> <u>Matters: Understanding Culture and Context From the Perspective of Key Stakeholders</u>

If you will be presenting findings from your ITEST project at Evaluation 2010, please email Alyssa Na'im (<a href="mailto:anaim@edc.org">anaim@edc.org</a>) to let her know.

### **Opportunities**

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## NSF Program Solicitation: Computing Education for the 21st Century (CE21)

## **NSF Program Solicitation: Cyberlearning: Transforming Education** (Cyberlearning)

Document Number: nsf10620

### **CLICK THE TITLE FOR ADDITIONAL CONFERENCES AND OPPORTUNITIES**

- <u>ADVANCED TECHNOLOGICAL EDUCATION (ATE) SOLICITATION</u> DEADLINE: October 21, 2010
- CYBERLEARNING TOOLS FOR STEM EDUCATION (CYTSE) CONFERENCE March 8-9, 2011
- TRANSFORMING STEM LEARNING (TSL) SOLICITATION March 11,

### **ITEST community news**

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## SHORT VIDEOS FROM LEARNING THROUGH ENGINEERING DESIGN AND PRACTICE: USING OUR HUMAN CAPITAL FOR AN EQUITABLE FUTURE PROJECT

View the videos at http://vimeo.com/k12engineering/videos

**Project:** Learning through Engineering Design and Practice: Using Our Human Capital for an Equitable Future Project

### **BIOINFORMATICS EDUCATION SHOULD START IN HIGH SCHOOL**

September 2010 | Source: Xconomy | By Jodie Spitze

The Puget Sound region is home to more than 175 biotechnology institutions. These facilities have many of the brightest minds focused on improving health here and around the world. As a high school science teacher, one of my aims is to excite students about rapidly growing and rewarding career pathways. More... <a href="http://itestlrc.edc.org/news\_and\_events/bioinformatics-education-should-start-high-school">http://itestlrc.edc.org/news\_and\_events/bioinformatics-education-should-start-high-school</a>.

Project: Bio-ITEST: New Frontiers in Bioinformatics and Computational Biology

### HELPING STUDENTS REACH HIGHER

Reach for the Sky program offers White Earth students a closer look at STEM disciplines

September 2010 | Source: University of Minnesota news

### Up, up, and away

Part of the focus of this summer's program was to study the earth's atmosphere, and the White Earth students (with the help of aerospace engineering and mechanics professor James Flaten and the U's Minnesota Space Grant High Altitude Ballooning Team) created experimental packages.

More...http://itestlrc.edc.org/news\_and\_events/helping-students-reach-higher

**Project:** Reach for the Sky: Integrating Technology into STEM Outcomes for American Indian Youth

## GIRL GAME COMPANY FEATURED IN COMPENDIUM OF BEST PRACTICE K-12 STEM EDUCATION PROGRAMS

September 2010

The Research Department and the Center for Youth Success at ETR Associates are proud to have our *Girl Game Company* program featured among 38 best practice programs in the 2010 edition of the Bayer Corporation's *Planting the Seeds for a Diverse US STEM Pipeline: A Compendium of Best Practice K-12 STEM Education Programs*.

http://www.bayerus.com/MSMS/web\_docs/COMPENDIUM.pdf

**Project:** Girl Game Company

### CT SCIENCE CENTER HOSTING CYBER-CHALLENGE

September 2010 | Source: Hartford Business Journal Online
Nearly 200 Connecticut high school freshmen will spend Monday competing in
mental gymnastics and exploring the Connecticut Science Center in Hartford,
courtesy of the state's biggest business lobby, the science center and others.
More... <a href="http://itestlrc.edc.org/news">http://itestlrc.edc.org/news</a> and <a href="events/ct-science-center-hosting-cyber-challenge">events/ct-science-center-hosting-cyber-challenge</a>

**Project:** Project Opening Doors: An AP mathematics and science strategy to prepare underrepresented students for college success and STEM careers

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### WORMS MAY HOLD CLUES TO NEUROLOGICAL DISORDERS

September 2010 | Source: NSF website

Basiru Leigh peers into a microscope in the lab of Oliver Hobert of Columbia University in New York. Leigh is examining mutant ground worms from a species known as C. elegans. "There! You see?" he exclaimed. "They are moving abnormally--in a circle instead of a U-shape." More...

http://itestlrc.edc.org/news\_and\_events/worms-may-hold-clues-neurological-disorders

Project: Harlem Children Society (HCS) Science and Engineering

### NCSU RESEARCHERS BUILD 'STEM TEAMS' FOR RURAL AREAS

October 2010 | Source: localtechwire

RALEIGH, N.C. – Students who grow up in small, rural towns do not have the same exposure to high-tech jobs as their "big city" counterparts and may not be aware of what it takes to be a rocket scientist or video-game programmer, according to N.C. State University. More...

http://itestlrc.edc.org/news\_and\_events/ncsu-researchers-build-stem-teams-rural-areas

**Project:** STEM Teams: Promoting Science, Technology, Engineering, and Mathematics Skills, Knowledge, Interest, and Career Awareness through Strategic Teaming

Resources TOP

#### **NEXT ITEST SOLICITATION**

According to the NSF Division of Research on Learning (DRL) ITEST website page, "The current ITEST solicitation is being revised. A new solicitation should be available in late Spring, 2011".

http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5467&org=DRL&from=home

## NATIONAL SCIENCE BOARD REPORT: PREPARING THE NEXT GENERATION OF STEM INNOVATORS

The development of the nation's human capital through our education system is an essential building block for future innovation. Currently, the abilities of far too many of America's young men and women go unrecognized and underdeveloped, and, thus, these individuals may fail to reach their full potential. This represents a loss for both the individual and society. Read more at: <a href="http://itestlrc.edc.org/resources/preparing-next-generation-stem-innovators">http://itestlrc.edc.org/resources/preparing-next-generation-stem-innovators</a>

# REPORT TO THE PRESIDENT: PREPARE AND INSPIRE: K-12 EDUCATION IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) FOR AMERICA'S FUTURE

America is home to extraordinary assets in science, engineering, and mathematics that, if properly applied within the educational system, could revitalize student interest and increase proficiency in these subjects and support an American economic renewal, according to a new report from an independent council of Presidential advisors. Read more at: http://go.edc.org/PCAST-STEM-

### Report

### E-News from the National Girls Collaborative Project (NGCP)

The goal of the NGCP is to maximize access to shared resources within projects and with public and private sector organizations and institutions interested in expanding girls' participation in STEM. View the e-newsletter at <a href="http://www.ngcproject.org/enewsletters/NationalGirlsCollaborativeProjectE-Newsletter-Sept2010.html">http://www.ngcproject.org/enewsletters/NationalGirlsCollaborativeProjectE-Newsletter-Sept2010.html</a>

### **DRLNET WEBSITES**

The ITEST LRC is a member of DRLnet, a group of resource centers serving five NSF <u>Division of Research and Learning in Formal and Informal Settings</u> (DRL)-funded program communities including: <u>Academies for Young Scientists</u>, <u>Discovery Research K-12</u>, <u>Informal Science Education</u>, and <u>Research and Evaluation on Education in Science and Engineering</u>. Each of these websites has information of interest to the ITEST community.

### **Social Networking**

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### **FACEBOOK**

The LRC has an updated Facebook page! You can get to the updated page with this shortened URL: <a href="http://go.edc.org/Facebook-National-ITEST-STEM-LRC">http://go.edc.org/Facebook-National-ITEST-STEM-LRC</a>

Suggestions on how to interact with this page:

- Click on 'like' at the top of the page. ITEST LRC updates will then appear in your Facebook news feed.
- Invite your colleagues to 'like' our page also!
- An LRC staff member will post a "Question of the Week" and regularly post a discussion topic. You can join or begin a discussion by clicking on the 'discussions' tab.

The ITEST Learning Resource Center