



Fourth Annual NSF ITEST Summit - February 6-8, 2007  
*New Learning and the New Learner: Harnessing  
IT to Reinvent the Education Landscape*

Event Overview

**EVENT AT-A-GLANCE**

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**1. SUMMIT THEME**

This year's summit focuses on *New Learning and the New Learner: Harnessing IT to Reinvent the Education Landscape*, and will explore some of these key questions facing our nation today:

- How can educators better prepare young people to fully participate in the new global economy?
- How can education be more responsive to the needs of the workforce of today and tomorrow?
- How can industry help shape the learning environment and new educational strategies?

**2. SUMMIT DATES/TIMES**

- Tuesday, February 6                      Noon\* - 9:00 PM
- Wednesday, February 7                8:00 AM - 5:00 PM, 7:00-9:00 PM
- Thursday, February 8                  8:00 AM - 1:00 PM

\* 8:00-11:00 AM Tuesday, February 6, 2007 - *Optional meetings with legislators. Continental breakfast and registration table open at 7:00 AM.*

**3. SUMMIT LOCATION**

Westin Arlington Gateway Hotel, 801 North Glebe Road, Arlington Virginia, 22203, 703-717-6200

**4. PURPOSE OF SUMMIT**

The summit is a great opportunity to:

- learn more from NSF and talk individually with program officers about the goals and specifics of the ITEST program
- make new and deepen existing connections with colleagues from across the country
- share what is being measured and learned by ITEST projects
- collaborate to shape the future of the LRC's research and collaboration/TA activities to support your work and the goals of the ITEST program
- engage in open dialogue with other thought leaders and a broader audience on how best to develop an IT and science literate workforce for the future

*Visit the newly designed website for Highlights of the 3rd Annual ITEST Summit:*

*<http://www2.edc.org/itestlrc2/2006summit/default.asp>*

**5. SUMMIT ACTIVITIES**

- Working time for ITEST project staff, the LRC and NSF: welcome, introductions, research/evaluation, small group working sessions, TA/Collaboration planning, developing and expanding connections, and learning about each other's work.
- Opportunities for ITEST project staff to connect with other thought leaders from industry, youth development, formal education, government, and academia to engage in an open dialogue.
- Celebration of the successes of the initiative and an opportunity to explore how the ITEST agenda can best influence policy and practice relevant to education and workforce development for STEM fields.

## Agenda Overview

DAY	Time	Activity	Presenters/ Hosts	Purpose	
DAY 1 FEBRUARY 6	7:00-10:00	Continental breakfast	LRC	--	
	7:00-12:00	Registration table open/Poster setup for available project staff	LRC	Project staff can register & get materials. Optional poster setup for available project staff.	
	8:00	<i>Gather at registration table to leave for optional appointments with legislators from 9:00-11:00</i>	<i>PIs who have scheduled appointments</i>	<i>Inform legislators of the work of local ITEST projects</i>	
	12:00-12:45	<b>SUMMIT BEGINS</b> with Lunch, Welcome & Event overview	NSF/LRC	Overview of event for all attendees – Cohort 4 attendees will be paired with C2 or C3 project staff	
	12:45-1:45	Opening Plenary**	LRC, NSF, guests	From New Learner to New Worker – Fulfilling the Vision of the H1B Visa Program	
	1:45-2:00	Break	LRC	--	
	2:00-3:30	C2 Lessons Learned Panel**	LRC/C2	C2 projects share their most valuable lessons learned, successes & challenges	
	3:30-4:00	Break	LRC	--	
	4:00-5:00	The New Learner**	LRC, youth, guest respondents	Panel presentation and discussion with youth participants and guest researchers and policy makers exploring the change in learning and career interests	
	5:00-6:00	Poster setup	--	Poster setup	
	6:00-6:30	Keynote**	LRC	Celebrate the work of ITEST and learn about other related initiatives at NSF and elsewhere	
	6:30-9:00	Reception/Dinner/Project Posters <i>(Video Postcards, Cohort Group Photos, Live/Remote poster sessions with project participants)</i>	All	Get to know each other, Cohort Group Photos: 7:00 PM Cohort 2, 7:30 PM Cohort 3, 8:00 PM Cohort 4 Live/remote project participant posters 7:30-8:30 PM	
DAY 2 FEBRUARY 7	8:00-9:00	Breakfast with NSF Program Officers	LRC/NSF	Projects get to know Program Officers	
	9:00-10:00	NSF Panel**	NSF	Learn about NSF priorities and ITEST Program	
	10:00-10:30	Cohorts 1, 2 & 3	Informal Networking/TA Liaison Discussions	LRC	Project Teams chat/network and/or meet with LRC Liaisons
		Cohort 4	LRC Approach to Research*	LRC	Introduce C4 to ITEST LRC's research approach
	10:30-10:45	Break	LRC	--	
	10:45-12:15	Concurrent sessions: Cohort 3 Year 1 evaluation presentations	LRC/ C3 PIs & Evaluators	In small groups Cohort 3 presents their programs, evaluation work and findings to C1, C2 & C4	
	12:15-1:30	Luncheon Keynote**	LRC/NSF	Background on NSF present and future interests	
	1:30-3:00	Research Working Groups	LRC	Research working groups share their work and welcome new C4 members	
	3:00-3:30	Break	LRC	--	
	3:30-5:00	Reaching & Teaching the New Learner**	LRC, teachers, guest respondents	Panel presentation by LRC and projects to share strategies to engage new learners and nurture their learning potential	
	5:00-6:00	Free Time	--	Relax	
	6:00-9:00	Birds of a feather small group dinners	LRC	Meet and network across projects on topics of interest	
DAY 3 FEBRUARY 8	8:00-9:00	Breakfast/Poster Session	All Cohorts, LRC	Informal Networking, Live/remote poster sessions with project participants 8:00-9:00	
	9:00-10:30	Facilitated Discussions	C1/C2/C3	PI-led discussions on topics relevant to ITEST	
	10:30-11:00	Break	LRC	Poster Takedown	
	11:00-12:00	Including All Learners in the New Learning Process**	LRC/guest presenters	Panel presentation with ITEST projects and guest respondents on ways to engage diverse learners in STEM education	
	12:00-12:45	Lunch & Closing Plenary**	LRC, NSF, guests	Celebrate the success of ITEST and share a collective vision for ITEST as a maturing program	
	12:45-1:00	Closing Remarks*	LRC, NSF	Reflect on event, identify next steps	
	1:00	Adjourn	--	--	
**Session will be webcast live and archived online			*Session will be recorded and archived online		

## Detailed Agenda: Day 1 – Tuesday, February 6, 2007

### PART I: REGISTRATION, CAPITOL HILL VISITS, POSTER SETUP

7:00-10:00 Continental Breakfast (*Fitzgerald Ballroom Foyer*)

8:00 Gather at registration table to go to Capitol Hill for *pre-scheduled* appointments with legislators (*Fitzgerald Ballroom Foyer*)

7:00-12:00 Registration Table Open/Poster Setup for available project staff (*Fitzgerald Ballroom and Foyer*)

### PART II: WELCOME, OPENING PLENARY, COHORT 2 PROJECT PANEL, NEW LEARNER PANEL (FITZGERALD BALLROOM)

Noon-12:45 Lunch, Welcome & Event Overview\*

12:45-1:45 **Opening Plenary\*\*:**  
**From New Learner to New Worker – Fulfilling the Vision of the H1B Visa Program**  
*Moderator: Joyce Malyn-Smith, ITEST LRC Principal Investigator*

**Description:** Panel presentation exploring the new economy and characteristics of the “new worker” needed to maintain our economic strength and position as a global leader.

**Key Questions:** What do we know now about what new learners are bringing to the workplace as “new workers”? What are employers seeking in the next generation of STEM workers? Why do we need a program like ITEST and what can it teach us?

**Presenters:**

- Megan Stewart, Vice President Global K-12, Adobe Systems Incorporated
- Ralph Coppola, Director Worldwide Education, PTC (Parametric Technology Corporation)
- Shirley Collier, CEO, Optemax

**Q & A**

1:45-2:00 **Break** (*Fitzgerald Foyer*)

2:00-3:30 **Plenary: Cohort 2 Lessons Learned Panel\*\***  
*Moderator: Sarita Nair-Pillai, ITEST LRC Co-PI*

**Description:** Cohort 2 PIs share lessons learned, successes & accomplishments on the following topics:

- **Fostering Persistence** – *Michele Masucci, Building IT Skills Among Inner City Youth*  
Strategies for preparing youth to deal with future systemic barriers and challenges (e.g., higher education and workforce)
- **Conceptual Understanding** – *Jazlin Ebenezer, Translating IT into Classrooms*  
Building and measuring conceptual understanding of program participants
- **Career Exploration** – *Sharon Sledge, National Middle School Aerospace Scholars*  
Successfully integrating career information into programs
- **Addressing Program ‘Bugs’** – *Joe Courneya, Understanding the Science Connected to Technology*  
Dealing with hard-to-solve problems
- **Evaluation** – *Deborah Muscella & Karen Peterman, Technology at the Crossroads*  
Different methods and approaches to program evaluation – successes and challenges

3:30-4:00 **Break** (*Fitzgerald Foyer*)

**4:00-5:00**    **Plenary: The New Learner\*\***  
*Moderator: Tony Streit, ITEST LRC Co-PI*

**Description:** Panel presentation and discussion with youth participants, guest researchers and policy makers exploring the change in learning and career interests.

**Key Questions:** What do young people get from ITEST experiences? What are they learning? How are these experiences different from other learning? How might it impact their decisions about college or careers?

**Presenters:**  
ESTEEM Youth Participants (In-Person)  
MuseumTech Youth Participants (Via Video Conference)

**Respondents:**  
Shireen Mitchell, President, Community Technology Centers' Network  
Ron Ottinger, Executive Director, The Noyce Foundation

**Q & A**

**5:00-6:00**    **Poster Set-Up/Free Time**

**PART III: OPENING RECEPTION & POSTER SESSION (FITZGERALD BALLROOM)**

**6:00-6:30**    **Commendation and Honors\*\***  
**Host:** Vivian Guilfoy, EDC Senior Vice President

**Opening Remarks** - Sylvia James, Program Director, National Science Foundation  
**Presentation of Commendation Letter** – EDC President Luther Luedtke  
**Honoring Emeritus Cohort 1 & Cohort 2 PIs** – Joyce Malyn-Smith

**6:30-9:00**    **Welcome Reception, Dinner and Poster Session**  
Fireside Conversations/Interviews, Video Postcards  
Group Photos – Cohorts 2, 3 & 4:  
    o 7:00 PM Cohort 2  
    o 7:30 PM Cohort 3  
    o 8:00 PM Cohort 4  
Live/remote poster sessions with project participants 7:30-8:30 PM

## Detailed Agenda: Day 2 – Wednesday, February 7, 2007

### **PART IV: NETWORKING WITH NSF & PROJECTS, COHORT 3 EVALUATION PRESENTATIONS, LRC APPROACH TO RESEARCH, KEYNOTE LUNCH, RESEARCH WORKING GROUPS, REACHING AND TEACHING THE NEW LEARNER PLENARY**

**8:00-9:00 Breakfast with NSF Program Officers (Fitzgerald Ballroom & Foyer)**

**9:00-10:00 NSF Panel\*\* (Fitzgerald Ballroom)**

*Moderator: Siobhan Bredin, ITEST LRC Project Director*

**Description:** ITEST leadership from NSF discuss the history and future of the program, and answer questions from ITEST project PIs, staff and evaluators.

**Panelists:** David Campbell, Sylvia James, Sharon Locke, Ron Tzur and other NSF staff

**10:00-10:30 Concurrent Sessions**

**Cohorts 1-3: Informal networking conversations/posters (Fitzgerald Ballroom)**

Project Teams chat/network and/or meet with LRC Liaisons.

**Cohort 4: LRC Approach to Research (Hemingway 2)**

Led by Leslie Goodyear, this session will introduce Cohort 4 to the ITEST LRC's research approach. The session will include a presentation of the approach, work done thus far, research topics identified by working groups, and a group brainstorm on research topics of interest to Cohort 4 project staff.

**10:30-10:45 BREAK (Fitzgerald Foyer)**

**10:45-12:15 Cohort 3 Year 1 Concurrent Session Evaluation Presentations**

In small groups cohort 3 presents their programs, evaluation work and findings; grouped by thematic area. After each concurrent session, there will be time for questions and discussion.

#### ***Session A: Environmental Science Projects (Hemingway 1)***

- Arctic Climate Modeling Program (Comprehensive)
- Urban Ecology, Information Technology, and Inquiry Science (Comprehensive)
- EcoScienceWorks: Exploring and Modeling Ecosystems Using IT (Comprehensive)
- DataTools: Tools for Data Analysis in the Middle School Classroom (Comprehensive)

#### ***Session B: Environmental Science Projects (Hemingway 2)***

- Pueblo ITEST of New Mexico (Comprehensive)
- Science Mission to Planet Earth: IT-Integrated Coastal Education (Comprehensive)
- Community for Rural Education, Stewardship and Technology (Comprehensive)
- SoBRO TEC—South Bronx Overall Economic Development Corporation (Youth-Based)

#### ***Session C: Computer Science Projects (Hemingway 3)***

- Build IT: Girls Building Information Technology Fluency Through Design (Youth-Based)
- Hi-FIVES: Highly Interactive, Fun Internet Virtual Environments in Science (Comprehensive)
- Invention Factory (Youth-Based)
- Photonics Leaders (Youth-Based)

#### ***Session D: Computer Science Projects (Fitzgerald Ballroom)***

- Physical Computing for Students and Teachers (Comprehensive)
- SPIRIT: Silicon Prairie Initiative on Robotics in IT (Comprehensive)
- XTech: A Collaboration of the Exploratorium and the San Francisco Beacon Initiative (Youth-Based)
- SUCCEED Apprenticeship Program (Youth-Based)

#### ***Session E: Bioscience & Computer Science Projects (Fitzgerald Ballroom)***

- Crime Scene Information Technology (Comprehensive)
- Marine Biotechnology and Bioinformatics (Comprehensive)
- SeaTech: Underserved Teens Hooked on Ocean Technology! (Youth-Based)
- Tech-Success (Youth-Based)

**12:15-1:30 Luncheon & Keynote\*\* (Fitzgerald Ballroom)**

**12:30-12:45 Opening Remarks:** Dr. Joan Ferini-Mundy, Division Director, Division of Elementary, Secondary, & Informal Education (EHR/ESIE), National Science Foundation

**12:45-1:30 Cyberinfrastructure Keynote:** Dr. Steven Castillo, Dean, College of Engineering, NMSU Regents Professor, New Mexico State University

**1:30-3:00 Research Working Groups**

Description: Research Working Groups share their work and welcome new C4 members.

**1:30-2:15 Overview of Working Groups (Fitzgerald Ballroom)**

**2:15-3:00 Working Group Breakouts**

- **Group 1 (Fitzgerald Ballroom) Embedded Evaluation,** Karen Peterman, Facilitating
- **Group 2 (Hemingway 1) Youth and Technology,** Joyce Malyn-Smith and Leslie Goodyear, Facilitating
- **Group 3 (Hemingway 2) Teacher Change,** Carrie Parker, Facilitating
- **Group 4 (Hemingway 3) Youth and STEM Career Choice,** Bethany Carlson, Facilitating

**3:00-3:30 BREAK (Fitzgerald Foyer)**

**3:30-5:00 Plenary: Reaching & Teaching the New Learner\*\* (Fitzgerald Ballroom)**

*Moderator: Joyce Malyn-Smith, ITEST LRC PI*

**Description:** Presentation on the learning patterns, preferences and characteristics of new learners. Teachers from ITEST Projects share strategies that engage new learners and nurture their learning potential.

**Key Questions:** What are the characteristics of the new learner, empowered with technology? What challenges are they posing to educators? What strategies are teachers using to reach and teach them?

**Presenter:**

- Julia Fallon, IT Education and Technology Integration Program Manager, Office of the Superintendent of Public Instruction, Washington State

**Voices from the Field:**

- Teachers from ITEST Projects (e.g. Translating Information Technology Into Classrooms – Teacher-Student Research on Lake Erie Ecosystem and others)

**Q & A**

**5:00-6:00 Free Time**

**PART V: BIRDS OF A FEATHER DISCUSSION GROUPS OVER DINNER (OPTIONAL)**

**SEE NEXT PAGE**

**6:00-9:00**

**Dinner Out with Colleagues (*meet in Fitzgerald Foyer*)**

Please sign up in advance at the registration table for an informal discussion on topics of interest. Groups go to local restaurants with an LRC staff member. Each person pays for her/his own meal.

- Gender and Diversity A – Sarita Nair-Pillai,
- Gender and Diversity B – Cynthia Newson
- Technology and Design (use of IT for design) A – Bethany Carlson
- Technology and Design (use of IT for design) B – Siobhan Bredin
- Community Development A – Suzanne Reynolds-Alpert
- Community Development B – Vivian Guilfooy
- Sustainability A – Alyssa Na'im
- Sustainability B -Joyce Malyn-Smith
- Evaluation Discussion - Leslie Goodyear
- Research Discussion - Carrie Parker
- Youth Development A - Tony Streit
- Youth Development B - Wendy Rivenburgh



## Detailed Agenda: Day 3 – Thursday, February 8, 2007

### PART VI: FACILITATED DISCUSSIONS, INCLUSION PANEL & CLOSING PLENARY

**8:00-9:00 Breakfast & Posters Session (Fitzgerald Ballroom & Foyer)**

**9:00-10:30 Concurrent Sessions: Facilitated Discussions**

Description: Thematic discussion sessions led by Summit Planning Committee PIs and invited guests. Session attendees will share strategies and best practices from their own projects, pose questions for discussion, and engage in a dynamic exchange on the discussion topic.

	ALL	YOUTH-BASED PROJECTS	COMPREHENSIVE PROJECTS
<b>9:00–9:45</b>	OERL - Online Evaluation Resource Library <i>Presenters: Edys Quellmalz &amp; Karen Mitchell, SRI International (Hemingway 2)</i> Through the OERL, ITEST PIs and evaluators can access a large collection of sound evaluation plans, instruments and reports from past and current NSF funded projects' evaluations.	Designing programs that address safety for youth <i>Facilitator: Michele Masucci (Ballroom)</i>	Models for use of students in comprehensive programs <i>Facilitator: Anya Dozier Enos (Ballroom)</i>
		Sharing best practices in youth development <i>Facilitators: Joe Courneya &amp; Melissa Koch (Ballroom)</i>	Urban vs. Rural program implementation: Successes & Challenges <i>Facilitator: Sharon Sledge (Hemingway 1)</i>
			Technology as a cross-project data sharing & collaboration tool <i>Facilitator: Len Annetta (Hemingway 3)</i>
	ALL	YOUTH-BASED PROJECTS	COMPREHENSIVE PROJECTS
<b>9:45–10:30</b>	OERL - Online Evaluation Resource Library <i>Presenters: Edys Quellmalz &amp; Karen Mitchell, SRI International (Hemingway 2)</i>	Urban vs. Rural program implementation: Successes & Challenges <i>Facilitator: Sharon Sledge (Hemingway 1)</i>	Sharing best practices in Professional Development <i>Facilitator: Bonnie Brownstein (Ballroom)</i>
		Technology as a cross-project data sharing & collaboration tool <i>Facilitator: Len Annetta (Hemingway 3)</i>	

**10:30-11:00 BREAK (Fitzgerald Foyer)**

Project staff should use this time to take down their posters.

**11:00-12:00 Plenary: Including All Learners in the New Learning Process\*\* (Fitzgerald Ballroom)**

*Moderator: Sarita Nair-Pillai, ITEST LRC Co-PI*

**Description:** Panel presentation and discussion exploring how ITEST projects are reaching and impacting diverse groups of youth and educators.

**Key Questions:** How are projects successfully facilitating STEM experiences with diverse groups of youth and educators? How can cultural relevance be incorporated into program practice most effectively? What support do educators need when implementing culturally competent STEM teaching in formal and informal settings?



**Presenters:**

Kathy Berry Bertram, Arctic Climate Modeling Program, University of Alaska-Fairbanks  
Christina Gilmore, Tech-Success, University of Oklahoma-Norman  
Randal August, Robotics: Fundamentals of IT and Engineering, Northeastern University

**Respondents:**

Kathryn Kailikole, Council for Opportunity in Education  
Bonnie Bracey-Sutton, Teacher and Agent of Change

**Q & A**

**12:00-12:45 Lunch & Closing Plenary\*\* (Fitzgerald Ballroom)**

*Moderators: Joyce Malyn-Smith, ITEST LRC PI & Siobhan Bredin, ITEST LRC Project Director*

**12:45-1:00 Closing Remarks\*/Adjourn (Fitzgerald Ballroom)**