

# International Society of the Learning Sciences



[www.isls.org](http://www.isls.org)



Newsletter #11 Fall 2009

## A message from the ISLS President, Iris Tabak

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### Upcoming conference submission deadlines

**ICLS 2010**  
Chicago, USA  
June 29-July 2  
[www.isls.org/icls2010](http://www.isls.org/icls2010)

**EARLI JURE 2010**  
Frankfurt am Mein  
Germany  
July 19-22  
[earli-jure2010.org/](http://earli-jure2010.org/)

**CONSTRUCTIONISM 2010**  
August 16-20  
Paris, France  
[http://www.aup.edu/news/special\\_events/constructionism2010.htm](http://www.aup.edu/news/special_events/constructionism2010.htm)



In May 2008 I received an email with the subject heading: "Interesting question for you." About a year later I find myself considering what the International Society of the Learning Sciences signifies and how it can best achieve its goals as I write "A Message from the ISLS President."

I smile when I recall how Mitch Nathan, who had taken on the role of first treasurer, walked around at the end of a conference session jotting people's names down on a scrap of paper and collected cash membership fees for the then recently formed ISLS. The forming of ISLS identified us to the world as a group of scholars with shared interests and missions, and it

promised us a stronger future for we now had an organization to back us up. Mitch's scrap of paper has since been replaced by an online membership system, and we have a database of members much too large to fit on a page. This international base of members is associated with two official conferences, two official journals, mentorship and educative projects, as well as many other initiatives and products of professional and scholarly activity.

We have come a long way, but there is still much to be accomplished. We need to streamline our administrative and governance activities. We need to find better ways to define ourselves as a collective while sanctioning and imbuing sufficient recognition to the varied endeavors that comprise the learning sciences, and we need to help our members disseminate their research in public as well as scholarly arenas so that we can have more impact on practice and policy.

The ISLS past presidents, board members, committee chairs and members have been instrumental in forwarding these and other goals. Most recently, Marcia Linn, established a community-building task force and instituted an ISLS board retreat. The community-building task force's vision was presented by Turadg Aleahmad at our first board retreat, and our technology committee headed by Ravi Vatrapu and Bruce McLaren is now working on a plan to put some of these ideas into play. Marcia, in her role as Past President, will continue to champion these ideas.

Please join me in congratulating Paul Kirschner on his election as President-Elect. He has devoted much thought and energy to the society (as evidenced by the successful ICLS2008 in Utrecht), and we look forward to his leadership. As President-Elect, as part of ongoing efforts to establish a functional "institutional memory," Paul will lead a team focused on gleaning and communicating the knowledge needed to successfully organize CSCL and ICLS conferences. This work continues and complements important work done by Chris Hoadley, who I believe can be credited with planting the first seeds of an institutional memory project, and by past conference organizers who provided us with detailed and thoughtful reports.

# ISLS Newsletter

We are privileged in welcoming four new board members: Frank Fischer, who is co-chair of the education committee; Susan Goldman, who is co-chair of the ICLS2010 conference; Elena Kyza, who is the editor of the ISLS newsletter; and Brian Reiser, who is co-chair of the publications committee. Many thanks are extended to Marcia Linn, Yasmin Kafai, Claire O'Malley, and Roy Pea who have just completed their terms of office on the board. Each of them has contributed greatly to the board and to the society, and they are each past presidents. I would also like to take this opportunity to express gratitude to two on-going officers. I thank Carolyn Rosé, who continues in her role as Secretary/Treasurer, and who has been relentless in shepherding us through the financial and legislative complexities of running a non-profit volunteer organization. I also thank Nancy Songer who as executive officer pretty much holds the whole society and board together, and ensures that we are up and running.

This past June we basked in the sunny beaches of Rhodes, as well as in the scholarly accomplishments of our colleagues at CSCL2009. Thank you Angeli-que Dimitracopoulou and the University of the Aegean for a wonderful conference. I know this would not have been possible without the dedication of the program committee, the local organizing team, the many members who volunteered to review

submissions, as well as many others. We extend our gratitude to all! We are equally looking forward to ICLS2010 which will take place on June 29-July 2 in Chicago, IL, co-chaired by Susan Goldman and James Pellegrino, hosted by the University of Illinois Chicago (<http://www.isls.org/icls2010/>). **Take note – November 2nd is the final submission deadline!**

Some of you have alerted us to some problems with our website. We unfortunately have been encountering some technical difficulties, but we are working to correct them, and appreciate your understanding. I especially appreciate the patience and perseverance of Sadhana Puntambekar, who just recently took on the role of the website committee chair. She and her team diligently try to maintain our site despite these issues. They and the technology committee will also be working on crafting a new look for our site.

Nancy Law who chairs the membership committee has been spearheading efforts to broaden our world-wide representation, especially in under-represented regions, and in forging ties with sister organizations. We are very fortunate that individual society members have taken initiative in these areas and contacted the membership committee about ways to increase participation in particular regions. Some of these individuals have subsequently joined the membership committee. Ben Kehrwald from New Zealand has

made some suggestions on increasing participation from his region, and contributed an article on this topic to our newsletter (see Newsletter #9 Fall 2008). More recently, Baba Kofi Weusijana, has been instrumental in helping us find out about communities with similar research interests in Africa, and in collaborating with the membership committee in initiating proposals to the board on how to establish connections with these communities. See his contribution on this topic in this issue of the newsletter.

We continue to welcome and encourage such and other initiatives from each and every society member on any area of activity relevant to the society. As the Beatles said: "I am he as you are he as you are me and we are all together." We are a society that is based on volunteerism. We have many aspirations for growth, more activities, and increased presence and impact. The only way we can achieve this is by greater participation of individual society members in our committees. Please join.

I invite you to contact me and to let me know of other things that you think the society should be doing or could improve on.

Thank you for the opportunity to serve as president of the society. I look forward to our working together over this coming year.

*Irís Tabak*

# ISLS Wants

# You



# To Join a Committee

To join an ISLS committee please contact the committee chair:

<b>Conferences:</b>	William Sandoval	Sandoval@gseis.ucla.edu
<b>Publications:</b>	Brian Reiser	reiser@northwestern.edu
<b>Education:</b>	Frank Fischer	frank.fischer@psy.lmu.de
<b>Membership:</b>	Nancy Law	nlaw@hkusua.hku.hk
<b>Website:</b>	Sadhana Puntambekar	puntambekar@education.wisc.edu
<b>Technology:</b>	Ravi Vatrappu	rv.caict@cbs.dk

For more information about ISLS committees please see: [http://www.isls.org/about\\_committees.html](http://www.isls.org/about_committees.html)

## New sections added to the newsletter!

We would like to make this newsletter as useful to the ISLS community as possible. Beginning in this issue, we have added a new section which will serve to announce new ISLS-related dissertations. If you have ideas for other types of announcements please send them along.

We would also like to hear from ISLS programs and researchers across the world. We particularly invite researchers in under-represented areas in the Society, such as Africa, to send us brief descriptions of their research or reports on what is happening in different parts of the world that would be of interest to the ISLS community.

*Elena Kyza - Newsletter editor*

**CSCL09 Computer-Supported Collaborative Learning Conference**

The eighth biennial conference on Computer-Supported Collaborative Learning (CSCL09) took place in Rhodes, Greece between June 8-13 last summer. The conference, which was hosted by the University of the Aegean and chaired by Angelique Dimitracopoulou, was a big success. More than three-hundred people attended the conference, representing 28 countries, mostly from Europe and North America. Over 340 proposals were submitted and the acceptance rate for full papers was estimated at 26.5%.



New elements of the CSCL09 conference were the organization of an educational policy pre-conference symposium, the "Technology Design Award", and the possibility to read abstracts and accepted papers ahead of time and publicly discuss them on the web. After a competitive process, three best paper awards were presented during CSCL 2009, in the categories "Best Paper Award", "Best Student Paper Award", and "Technology Design Award". The winning papers were as follows:

**BEST PAPER AWARD**

**From handheld collaborative tool to effective classroom module: Embedding CSCL in a broader design framework**

*Jeremy Roschelle, Ken Rafanan, Gucci Estrella, Miguel Nussbaum, Susana Claro*

**Abstract:** The TechPALS project expanded a general-purpose handheld CSCL tool (from Chile) to a 3-week classroom module for primary school mathematics (in the United States). To go from tool to module we articulated a framework for an effective CSCL practice—including curricular fit, training materials, pedagogical guidance, formative and summative assessments, and logistical support. In parallel, to meet requirements of the U.S. Department of Education, we conducted classroom experiments to investigate the achievement differences between students who were randomized to use either TechPALS or a non-CSCL product. In this paper, we examine the design changes from initial classroom pilot tests to eventual attainment of statistically significant results, emphasizing the integration of technology, activity designs, and broader educational practices that was required to achieve impacts in ordinary, low-income schools. Based on these results, we recommend a "curricular activity system" framework to support effective CSCL practices.



## CSCL2009 Awards

### Best Student Paper Award

**“Tatiana: an environment to support the CSCL analysis process”**

*Gregory Dyke, Kristine Lund, Jean-Jacques Girardot*

**Abstract:** The analysis of multimodal computer-mediated human interaction data is difficult: the diverse nature of this data and its sheer quantity is challenging enough, but a further obstacle is introduced by the complex nature of these interactions. In this paper, we describe the kinds of activities performed by researchers wishing to analyze this data. We present a model for analysis based on these activities. We then introduce Tatiana (Trace Analysis Tool for Interaction Analysts) as an environment based on this model and designed to assist researchers in managing, synchronizing, visualizing and analyzing their data by iteratively creating artifacts which further their understanding or exhibit their current understanding of their data. We show how Tatiana can be used to perform analyses and its potential for sharing corpora and analyses within the research community.

**“Inscriptions becoming representations”**

*Richard Medina, Daniel Suthers, Ravi Vatraru*

**Abstract:** This paper analyzes the interaction of three students working on mathematics problems over several days in a virtual math team. Our analysis traces out how successful collaboration in a later session was contingent upon the work of prior sessions, and shows how representational practices are important aspects of these participants’ mathematical problem solving. We trace the formation, transformation and refinement of one problem solving practice—*problem decomposition*—and three representational practices—*inscribe first solve second*, *modulate perspective* and *visualize decomposition*. The analysis shows how inscriptions become representations for the group through a historical trajectory of negotiation. This result is of theoretical interest because it shows how the practices underlying group cognition are contingent upon not only the immediate situation but also the chronologically prior resources and associated practices.

### Technology Design Award

**“eJournalPlus: Development of a collaborative learning system for constructive and critical reading skills”**

*Toshio Mochizuki, Hiroki Oura, Tomomi Sato, Toshihisa Nishimori, Mio Tsubakimoto, Jun Nakahara, Yuhei Yamauchi, Johansson Kjell Henrik, Kenichiro Matsumoto, Shinichi Watanabe, Takashi Miyatani.*

Locate the full papers in the CSCL09 proceedings on the conference website (<http://cscl2009.blogspot.com/>) or purchase them through [lulu.com](http://lulu.com) and [Amazon.com](http://Amazon.com).



Don't miss the next **CSCL** conference, which will take place in Hong Kong in 2011.

## Conference Announcements

ICLS2010  
SUBMISSION  
DEADLINE:

November 2, 2009

Visit <http://www.isls.org/icls2010> for more up to date information on the ICLS2010 conference.



**ICLS**  
INTERNATIONAL CONFERENCE  
OF THE LEARNING SCIENCES  
**2010**  
*Learning in the Disciplines*

June 29 - July 2  
Pre-conference June 28 - 29  
Chicago Palmer House Hilton Hotel

**University of Illinois at Chicago**

Final submission deadline:

Full Paper, Poster, and Symposia submissions:

- November 2, 2009

Pre-Conference Workshop submissions:

- December 15, 2009

Doctoral Consortium and Early Career Workshop submissions:

- February 15th, 2010



## EARLI JURE 2010

The 13th conference of the Junior Researchers of the **European Association for Research on Learning and Instruction (EARLI)** is taking place in Frankfurt am Main, Germany, from 19 until 22 July 2010.

The theme for JURE 2010 is "**Connecting Diverse Perspectives on Learning and Instruction: A Conference of Synergy**". Currently, there is a wide range of perspectives on learning and instruction within and across specific domains. Moreover, the lifelong educational process is viewed from various perspectives, and different methodological arenas coexist. Hence, JURE 2010 aims to connect diverse perspectives in research on learning and instruction with the intention of exploring and discussing comprehensive and interdisciplinary ideas. By connecting these diverse perspectives, young researchers can broaden their view and learn from each other.

JURE 2010 features for the first time in its history a Best ICT Demonstration Award. In addition to other awards of the conference, the ICT Demonstration Award is specifically dedicated to junior researchers in the fields of computer supported collaborative learning and technology enhanced learning.

For more information, please see the first call for proposals <http://earli-jure2010.org/>.

### IMPORTANT DATES

Opening of the  
submission system:  
October 15, 2009

Deadline for proposal  
submission: November  
27, 2009

## Towards a Global Learning Sciences Society: ISLS Membership Participation in Africa

Contributed by *Baba Kofi Weusijana*

*Baba Kofi Weusijana* is a software engineer and researcher at the Math Forum at Drexel University

In our efforts to expand the membership of the International Society of the Learning Sciences we should make concerted efforts to grow in areas outside our current base in the North Americas, Europe, and parts of Asia.

I particularly encourage us to seek membership and more importantly knowledge sharing and mutual understanding with those in Africa. Although my ancestral homeland is near and dear to my heart, I echo the concerns of others in ISLS that we need to be more creative and resourceful in efforts to expand globally. Benjamin Kehrwald, senior lecturer at Massey University, New Zealand, expressed similar concerns in his article "Worldwide Membership representation: Continuing the conversation" in the Fall 2008 ISLS newsletter.

The Learning Science community and Africans could gain

much from African ISLS participation and collaboration. We would all gain new perspectives, and more people working on similar and diverse problems. We could also see more impact on people who need education to improve or maintain their quality of life.

For those of us who focus on educational technology solutions, opportunities abound. Much work could be done on mobile phone applications towards education. There are also opportunities for those interested in investigating robust technologies for developing areas such as solar-powered, intermittent power tolerant, and low-power devices.

The ISLS membership committee is considering forging collaborative and mutually supportive arrangements with other conferences, including with the eLearning Africa annual confer-

ence. ISLS is seeking partnership with organizations like e-Learning Africa to enhance knowledge of and participation in the Learning Sciences and gain access to related African knowledge and practices.

I also encourage ISLS members to participate in the e/merge virtual conferences on educational technology in Africa. The conference is held every two years and is organized by the Centre for Educational Technology at the University of Cape Town; the next one is being planned for 2010. You can see the 2008 website at <http://emerge2008.net>.

If you have connections in Africa or ideas on how to further ISLS involvement there or African participation in ISLS, please contact ISLS membership chair Nancy Law <[nlaw@hkusua.hku.hk](mailto:nlaw@hkusua.hku.hk)> and myself <[kofi@edutek.net](mailto:kofi@edutek.net)>.



[www.isls.org](http://www.isls.org)



<http://www.elearning-africa.com>

5<sup>th</sup> International Conference on ICT for Development,  
Education and Training  
Mulungushi International Conference Centre, Lusaka, Zambia  
May 26–28, 2010

An Annual Event for Developing eLearning Capacities in Africa



## CONSTRUCTIONISM 2010

The Constructionism 2010 conference will take place in Paris, France. Graduate students are especially invited to present posters based on their work in progress, classroom experiences, and constructionist ideas and theory. The deadline for submission of poster abstracts is April 30, 2010. Affordable food, housing, and registration discounts are available for students.

For more information please visit [http://www.aup.edu/news/special\\_events/constructionism2010.htm](http://www.aup.edu/news/special_events/constructionism2010.htm)

Please send announcements of recent ISLS Ph.D. to the newsletter editor.

## New ISLS-related Ph.D. Dissertations



Dr. Sneha Veeragoudar Harrell

### Dissertation title

*Second Chance At First Life: Fostering The Mathematical and Computational Agency Of At-Risk Youth*

### Ph.D. Granting Institution

University of California,  
Berkeley, USA

### Advisor

Dor Abrahamson

### Graduation Year

2009

### Abstract

In the USA, women and many ethnic minority groups are underrepresented in Science, Technology, Engineering, and Mathematics (STEM) professions. Amidst the failure of federal responses, e.g., NCLB, to reach students by operating at the school level, this dissertation explores the viability of a

campaign to reach each individual student and mobilize and empower them as agents in their own STEM learning.

At an alternative high school serving predominantly at-risk underrepresented students evicted from mainstream education, I implemented *Fractal Village*, a critical/computational/constructionist-pedagogy (C3) learning environment of my design. Fractal Village, instantiated in the virtual-world "Second Life," constituted an empirical environment to research my emergent model of *mathematical/computational agency (m/c)* as well as an intervention aiming to foster such agency. Key research objectives were to: (1) study relations amongst cognitive, affective, material, technological, and social factors that would contribute to individual development of m/c agency; (2) delineate design principles for fostering m/c agency; (3) implement a sustainable program in collaboration with school personnel.

The student cohort engaged collaboratively in virtual-world imaginative construction activities each manifesting *generative themes* (Freire, 1968), to which the designers-as-teachers tailored mathematical and computer-science concepts, such that students appropriated the STEM content *apropos* of tackling their own emergent construction prob-

lems. Through the lens of three case studies, I argue that to build agency, students must develop both skills and dispositions—a spiraling inter-constructive growth. Student S., a self-professed gang member who could not imagine his post high school future at the beginning of the study, expressed interest in becoming an architect after learning basic programming concepts while constructing a virtual skyscraper. Student B., categorized as Special Education with an Individual Education Plan limiting his intellectual activity to 20-minute durations, realized for the first time ever that he could become an engineer after engaging in 110-minute demanding sessions. Student D, however, discontinued participation in the project, underscoring the imperative to sensitively evaluate in-coming students' skills and dispositions. I conclude that we can, and must, engage at-risk youth by helping them to build STEM identities, engaging their a priori m/c agency, and customizing skills and dispositions-related classroom discursive supports.

*Sneha is currently a post-doctoral research fellow at TERC.*



## New ISLS-related Ph.D. Dissertations



Dr. Matthew Sharritt

### Dissertation title

Students' Use of Social and Cognitive Affordances in Video Game Play within Educational Contexts: Implications for Learning

### Ph.D. Granting Institution

University of Hawai'i at Mānoa, Honolulu, HI, USA

### Advisor

Daniel D. Suthers

### Graduation Year

2008

### Abstract

Extensive literature has shown that games can provide an engaging, dynamic, and authentic learning context. Many of the studies on the use of games in education indicate that games can support teaching standards and outcomes; however, they do not describe actual uses of

video games for learning. Through the analysis of affordances employed by student gamers, an understanding of how learning takes place can inform the design of effective educational games and aid their integration into contemporary classrooms. Informed by ethnomethodology, this study used methods of grounded theory provided a detailed description of the use of video games for learning in educational contexts.

Results demonstrate that learning occurs across multiple levels: the mastery of the computer interface, followed by the mastery of the game interface and upon which students can achieve advanced strategy aimed at goal achievement. Learning also occurs across multiple granularities: occurring either in short episodes, sequences of episodes, or trends. Learning can be triggered by multiple cues, such as failure, game visualizations or specific representations, as well as by peers or teachers in the social environment.

Students used affordances provided by the game interface and learning environment, specifically: the visual representations of games afford particular actions; the persistent display of historical context as well as present and future potentials motivates learning; specific cues can grab attention, helping

to focus efforts on new or under-utilized game tasks; consistent and well organized visualizations encourage learning; and information presented in a plurality of channels is most effective for learning.

The use of social peers in collaborative learning had several effects on the learning process: peers disclosed information to achieve shared meaning of objects' purposes, and negotiated to collaboratively choose game strategies. Peer teams served cooperative roles as information sources and competitively as a performance gauge.

Implications for students, educators, and game designers are offered to better play, implement, and design games for learning. A brief comparison of findings with existing theory discusses similarities among collaborative learning and activity theory, and suggests opportunities for future work. Overall, findings indicate a great potential for the use of games in education for learning.

For more info: <http://www.situatedgaming.com/games.html>

*Matthew is President and co-founder of Situated Research, LLC, located in Naperville, Illinois ([www.situatedresearch.com](http://www.situatedresearch.com)), which specializes in advanced user experience research and usability testing within software and video games.*



[www.isls.org](http://www.isls.org)

### Newsletter #11

The ISLS newsletter is published twice a year (Spring, Fall).

Please send items for inclusion in the newsletter or ideas for contributions to the newsletter editor, Elena Kyza ([elenakyza@gmail.com](mailto:elenakyza@gmail.com))

# ISLS Newsletter

## New LS-related Ph.D. Dissertations



Dr. Suzanne Reeve

### Dissertation title

*Health beliefs and practices of young people in a multicultural community: Findings from a child-centered ethnography.*

### Ph.D. Granting Institution

University of Washington  
(Seattle), USA

### Advisor

Philip Bell

### Graduation Year

2009

### Abstract

Suzanne Reeve graduated from the University of Washington (Seattle) in June 2009 with a Ph.D. in Learning Sciences. Her dissertation is titled "Health beliefs and practices of young people in a multicultural community: Findings from a child-centered ethnography." The dissertation presents an analysis of the health-related beliefs and behaviors of thirteen fourth, fifth, and sixth grade children from diverse ethnic, linguistic, and socioeconomic backgrounds, as evidenced through photo self-documentation, semi-structured interview responses, and more than a year of ethnographic observations in home,

school, and other settings. The analysis shows greater diversity in the meanings these young people assigned to the concepts "healthy" and "unhealthy" than has been acknowledged in significant segments of the existing literature. The findings also show that children draw extensively on experiences from formal schooling and their non-school everyday lives and practices in talking about health-related concepts. Implications of these findings for science education include increasing the amount and conceptual sophistication of content related to health in the science classroom, in accordance with a broader emphasis on making science teaching relevant to students' local and personal contexts.

*Suzanne is currently pursuing a life science teaching certification at the University of Washington.*

## Job Announcements

### Faculty position at the University of Illinois at Chicago

The University of Illinois at Chicago invites applicants for a joint faculty position at the rank of assistant professor in Natural Sciences and the Learning Sciences beginning August 16, 2010.

The position is offered as part of a university-wide interdisciplinary initiative in the Learning Sciences (<http://www.lsri.uic.edu>), which currently has four split-appointment faculty members in addition to over a dozen active associated faculty. A Ph.D. program for Learning Sciences has recently been approved and has enrolled its first students. The natural science departments (Biological Sciences, Chemistry, Earth and Environmental Sciences, and Physics) situated in the College of Liberal Arts and Sciences have strong programs in teaching and in all areas of

basic research, including vibrant Ph.D. programs.

We seek applicants with a record of research and publication focusing at the nexus of an area of Natural Science and the Learning Sciences. Candidates may hold a doctorate in a natural science or a closely related field, or may hold a masters degree in a natural science in addition to a doctorate in the Learning Sciences or a closely related field. They should have a demonstrated record of research focusing on the support of science learners at one or more levels. Position responsibilities include carrying out a program of research and scholarship at the national level, teaching in the natural science department where the person will be appointed and teaching graduate

courses in the Learning Sciences Program.

Applicants for the position must submit a vita and statement of research and teaching interests. These should be submitted electronically to [lssearch@uic.edu](mailto:lssearch@uic.edu). Three letters of recommendation should be forwarded to the LS/NS Search Committee in care of Deana Donzal ([deana@uic.edu](mailto:deana@uic.edu).) Please contact Deana for surface mail address if you are unable to submit electronically. Review of applications will begin immediately and continue until the position is successfully filled.

UIC is an Affirmative Action/Equal Opportunity Employer seeking applicants who are from diverse backgrounds and/or have disability status. Final authorization of the position depends upon availability of state funding.

## Job Announcements

### Post-doctoral scholar position, University of California, Berkeley

#### Technology-enhanced Learning Postdoctoral Scholar Position

An NSF-funded research project at the University of California, Berkeley, seeks a postdoctoral scholar interested in investigating how interactive, online, scientific visualizations can benefit teaching and learning in science. Applicants must have earned a recent Ph.D. in science education or a related field with a focus on spatial ability,

assessment, technology, or instruction. Experience with design, implementation, and analysis of science materials is an asset.

The position, which could start as soon as January 15, 2010, has an annual salary of \$49,452 and is for one year, with possible renewal for a second year.

To apply, send a CV, statement of purpose, one or more academic papers, and the names

of 3 potential references, post-dated by **November 1, 2009** to Darah Vickery Savitt, Graduate School of Education, 1501 Tolman Hall, University of California, Berkeley, CA 94720.

Further information about our research can be found at <http://www.telscenter.org/>.

The University of California is an equal opportunity, affirmative action employer.

### Education Researcher, Center for Technology in Learning, SRI

Job #100268

#### Position Description

The Center for Technology in Learning leads large research and development projects and evaluations regarding the role of technology in improving learning, focusing most often on K-12 teaching and learning in science and mathematics. Using quantitative and qualitative methodologies, our investigations result in several outcomes---new knowledge about teaching and learning, new educational assessments and instrumentation for research purposes and the identification of design principles that inform educators and policymakers about important educational issues. This position requires an applicant to be well-prepared to grow into a Principal Investigator role in research relating to learning

sciences, assessment and/or technology. Individuals interested in research on the design, analysis, and interpretation of educational assessments that adhere to principles of evidence-centered design, and who have knowledge of the methods needed to establish the technical qualities of such assessments are encouraged. Applications are also invited from researchers who already have a funding track record with the National Science Foundation or the United States Department of Education.

This researcher will join a large multidisciplinary team conducting research on the design, analysis, and interpretation of educational assessments in science inquiry. Other responsibilities include contributing to research projects focused on bridging formal and informal

learning and on technology-enhanced instruction. Applicants should have expertise in the design of research studies that focus on STEM education content, classroom practices, possibly including the use of formative and summative assessments for instructional purposes. Applicants must be able to construct a range of instruments (e.g., surveys, interviews, observation protocols) that are needed in the conduct of research and evaluation studies.

Ph.D. on a topic relating to assessment, science education, or educational evaluation is required.

#### How to apply

Apply via our web page: [www.sri.com/jobs](http://www.sri.com/jobs) to job number 100268

## Job Announcements

### Research Program Director, Center for Technology in Learning, SRI

The Center for Technology in Learning (CTL) is growing and seeks to hire a new Research Program Director to leverage our broad and deep bench of talent and our extensive capabilities to perform high-impact projects by developing a multi-million dollar program of research. The successful candidate will see this position as an opportunity to address one or more large, important and enduring challenges in teaching and learning by engaging CTL's unique level of intellectual collegiality and disciplined capacity to manage large, complex projects. This position is for the rare senior leader who wants to go beyond what is possible in a university setting, has the demonstrated capability to bring in the required funding and thrives by engaging a creative and dedicated professional team towards a mission-driven program of research and development.

CTL's talented staff (over 60 strong) includes expertise in program evaluation, developing innovative software, technology-enhanced assessments, and designing curricula and teacher professional development offerings in Science, Technology, Engineering and Math (STEM) subject areas. In addition, SRI

offers excellent support in research design and statistical analysis, fielding large data collections, and managing complex projects. Further, SRI has amazing track record of innovations and depth of technical expertise in Policy, Computer Science, Artificial Intelligence, and beyond (see [www.sri.com](http://www.sri.com) for details). CTL has a matrixed structure which supports building project-specific teams by drawing upon the full range of talent in our staff. The successful candidate will work closely with CTL co-Directors and senior research scientists, as well as research capabilities throughout SRI.

The candidate may propose a program of research and development in areas such as technology-enhanced assessment, speech-recognition-enabled learning applications, computer supported collaborative learning, 21st century skills and STEM content, breakthrough online curricula, bridging informal and formal learning environments, wireless and hand-held devices for learning, bringing research-based innovations to scale in regional or state-wide initiatives, etc. The candidate must be prepared to discuss their practices of developing staff talent, leading multidis-

ciplinary teams, partnering across institutions, success in exceeding client expectations and maintaining quality in large, complex projects.

#### Requirements:

The candidate must exhibit a track record of raising significant program funds from two or more types of sources, which may include federal agencies, states, philanthropies, corporations and international governments. The candidate must show capability for adaptively collaborating in an organization that treats its employees as independent professionals who have a right to professional growth and challenging work as well as a responsibility to get the work done on time and with the highest standards of quality.

Candidates should include a cover letter that sketches the opportunity they see in engaging with CTL.

#### How to apply:

Apply via our web page at: <https://sri.ats.hrsmart.com/cgi-bin/a/highlightjob.cgi?jobid=3998>

## Other Announcements



[www.isls.org](http://www.isls.org)

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The ISLS newsletter is published twice a year (Spring, Fall).

Please send items for inclusion in the newsletter or ideas for contributions to the newsletter editor,

Elena Kyza  
(elenakyza@gmail.com)

### New Grant

**Project Title:** Science Assistments Project -ASSISTments Meets Science Learning (AMSL; R305A090170).

**Principal Investigator:** Janice Gobert, Worcester Polytechnic Institute, USA.

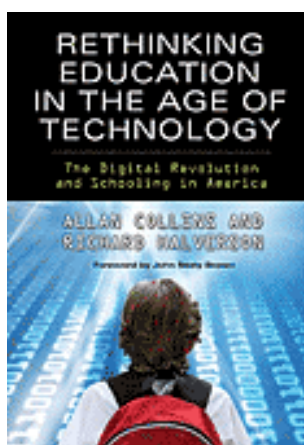
**Co-Principal Investigators:** Neil Heffernan, Ken Koedinger, & Joe Beck.

Awarded February 1, 2009 from the U.S. Dept of Education; \$1,187,432.

*For more information on this project please visit*

[http://users.wpi.edu/~sci\\_assistments/](http://users.wpi.edu/~sci_assistments/)

### New Book out!



Allan Collins and Richard Halverson have published a new book, titled *"Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America"*.

**Advance Praise for *Rethinking Education in the Age of Technology***

"The most convincing account I've read about how education will change in the decades

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**The book is also available in paperback and can be purchased online or in bookstores.**