

International Society of the Learning Sciences



www.isls.org



Newsletter #10 Spring 2009

A message from the ISLS President, Marcia Linn

I am looking forward to seeing everyone at the CSCL meeting in Rhodes. Angelique Dimitrakopoulou and her committee have planned an exciting program of intellectual and collaborative activities. The theme *CSCL Practices* is timely and important, consistent with the rapid advances in collaboration technologies. This meeting will allow us to strengthen and elaborate our understanding of the role of collaborative learning in classrooms, the workplace, and everyday life.

This year, ISLS has focused on building the community and increasing year-around opportunities for intellectual interactions—using the tools and technologies we study in our research. The Community Building Task Force is planning some experimental uses of collaborative technologies during and after the meeting. Look for them when you arrive! And, be sure to tell us if you plan to blog or twitter about the meeting.

The committee has already tried a few collaborative technologies. The ISLS Facebook group is large and growing. Users list employment opportunities, announce new publications, and plan for the annual conference. Join the Facebook group now if you are not a member.

Be sure to contribute your suggestions for new collaborative opportunities for ISLS in response to the survey circulated in May. If you have not responded, please take a moment to let us know your thoughts and ideas.

The ISLS board will hold a retreat before the Rhodes meeting to act on recommendations for improving the society. Chairs of each committee have prepared reports that document progress and recommend new initiatives. The survey results will offer additional suggestions and help us determine which of recommendations have the most support from the membership. We welcome additional suggestions and recommendations from the membership—post them in the Facebook discussion, send by email, or chat with board members in Rhodes. We will also discuss recommendations with the membership at the open meeting during the conference. Expect a summary of the plans in the next newsletter.

I would like to thank all the people who have strengthened the organization and made being president of ISLS so rewarding—really all the members of ISLS. In particular, Turadg Aleahmad has contributed expertise, leadership, and innovative ideas to the Community Building Task Force. Special thanks go to the committee chairs who have recruited participants, polled their members, and come up with reports and recommendations: CSCL (Hans Spada & Dan Suthers), Conference (Bill Sandoval), Education (Frank Fischer), Membership (Nancy Law), Publications (Cindy Hmelo-Silver & Chris Hoadley), Website (Carolyn Rose and Sadhana Puntambekar), Institutional Memory (Chris Quintana & Naomi Miyake). The board members have all contributed valuable insights and helped advance the organization. The newsletter editor, journal editors, and reviewers have ensured the intellectual life of the organization. Nancy Songer, the executive officer, has provided leadership, encouragement, and insight. She has developed new solutions to numerous vexing problems. Carolyn Rose, the Finance Officer faced the difficult challenge of getting the organization back onto a sound accounting trajectory. She has overcome numerous obstacles and frustrations to bring the organization up-to-date.

ISLS is a marvelously collaborative organization that could not succeed without the numerous, enthusiastic contributions of its members. I encourage members to participate in several ways: by volunteering for a committee, coordinating a collaborative activity, presenting at the annual meeting, and contributing to the publications. Multiple interactions with other members will allow everyone to reap the benefits of the organization.



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Upcoming conferences

COGSCI 2009

Amsterdam

The Netherlands

July 29-August 1

cognitivesciencesociety.org

EARLI 2009

Amsterdam

The Netherlands

August 25-29

www.earli2009.org

ESERA 2009

August 31-September 4

Istanbul, Turkey

www.esera2009.org

Plan your participation in ICLS2010!



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

ICLS2010 will be the ninth ICLS conference.

Check the website for more info on the submission process.

[http://
www.lsri.uic.edu/
icls2010](http://www.lsri.uic.edu/icls2010)

Visit [http://
www.isls.org/
conferences.html](http://www.isls.org/conferences.html)
for links to previous
ISLS conferences.

Chicago, IL, the third largest city in the United States, is often mentioned as the home of Barack Obama, but Chicago is also home to many famed cultural institutions, historic architecture, diverse neighborhoods, great restaurants, and a friendly charm seldom seen in urban centers.

Join us this summer to discuss "Learning in the Disciplines," a theme that highlights key Learning Sciences questions:

- How can disciplinary practices and understanding inform LS research, theory, and design?
- How does learning vary across disciplines; what, if anything, is constant?
- How are disciplinary practices and knowledge represented in educational settings, designs, and instruction? How might they be reconsidered?
- How can collaborative research and comparative perspectives contribute to LS research and practice?

Visit the ICLS 2010 Website for The Call for Proposals

(Available June 30, 2009)

<http://www.lsri.uic.edu/icls2010>

Preconference Activities

- Doctoral Consortium
- Early Career Workshop
- Field-Initiated Workshops

Special Invited Sessions and Strands

- Identity as a lens on learning, within and across the disciplines
- Representational practices and modeling within and across disciplines
- Professional disciplinary education as a context of research and practice



Learning Sciences Research Institute & Doctoral Program



CSCL09 Join us in Rhodes:

Virtual participation opportunities and beyond!



CSCL09
COMPUTER-SUPPORTED COLLABORATIVE LEARNING

Conference Dialogue blog

Welcome to the CSCL2009 dialog blog!

It is our great pleasure to welcome you on the CSCL2009 pre-conference dialogue blog!

The purpose of the blog is to facilitate the dialogue between the authors and other participants of the conference, before, during and after CSCL 2009 conference. There is a post containing the abstract along with a link to the full text for every paper that will be presented at the conference. You can also the abstract of a paper, read the full text, post your comments and/or questions, exchange ideas...

Tags associated with the topics of the papers have been assigned to the related posts so that you have the choice of filtering the content you want to read. Just click on a tag and all posts concerning the papers of the corresponding category will be displayed on the main blog's page. You can then scroll through the posts of this certain category until you find the one(s) you are interested in. All tags are displayed in the tag block on the right column of the blog's page.

The meanings of the tags are described here below:

Regarding the paper categories:

- AF (full papers)
- AFi (full papers that will be presented in interactive format)
- APi (short papers that will be presented in interactive format)
- AS (short papers)
- AP (posters)

CSCL Practices
8-13 June 2009
Rhodes, Greece

Change Space

- Reasonated Space
- Main Website

Labels

- AF (26)
- APi (2)
- APi (16)
- AS (42)
- ASP (23)
- BPN (4)
- BSPN (4)
- BTDN (5)
- PS_1 (4)
- PS_10 (2)
- PS_11 (6)
- PS_12 (3)
- PS_13 (2)
- PS_14 (8)

The biennial international conference on Computer-Supported Collaborative Learning is almost here! This year's conference is the eighth in its series.

Check out the conference program by visiting http://www.isls.org/cscl2009/v0.8_CSCL2009_Conference_Program.pdf

The conference theme is on CSCL practices. True to its theme, the conference organizers invite ISLS members to participate in the event, even if they are not able to be physically present in Rhodes! Among others, visit

the Conference Dialogue Blog (<http://cscl2009.blogspot.com/>) for a chance to read, provide comments and discuss papers before and during the conference!

CSCL2009 will take place in Rhodes, Greece, between June 8-13. Visit <http://www.isls.org/cscl2009> for more up to date information and virtual participation opportunities.



New addition to the Learning Sciences list of programs

Utah State University is pleased to formally announce an official commitment to supporting research and training in the Learning Sciences through the renaming and rebranding of its highly successful Department of Instructional Technology to the Department of Instructional Technology and Learning Sciences (ITLS).

The newly-renamed department, headed by Dr. Mimi Recker, offers both doctoral and masters degree programs, as well as certificates and minors in the areas multimedia development and information sciences.



The breadth of research and development work conducted in the ITLS department

includes cross-cultural studies of learning, gaming, computer-based simulation tools, problem-based learning, pedagogical agents, digital libraries, student cognition, open-learning resources, and classroom activity design.

While instructional technology and instructional systems design continues to be an important emphasis in the curriculum, the department is eager to be a space for inter-

disciplinary innovation and collaboration between the fields of instructional technology and learning sciences.

Utah State University is nestled in the heart of the beautiful Rocky Mountains, and is a great place to live, study, and play.

See what it is all about at <http://itls.usu.edu> or in the forthcoming feature article in Educational Technology Magazine.

Victor R. Lee,
Assistant Professor
Utah State University

Recognition of Learning Sciences Members



The 2009 Jan Hawkins Award

Susan Yoon, Assistant Professor with the Penn Graduate School of Education, was selected as the 2009 Jan Hawkins Award for Early Career Contributions to Humanistic Research and Scholarship in Learning Technologies recipient. The award is presented each year by AERA's Division C.

This year's award was presented at a special ceremony during the annual AERA conference. Dr. Yoon was also invited to present her work during the Jan Hawkins award session.

Congratulations Susan!

Heather Leary awarded 2009 AERA SIG-ATL/LS Best Student Paper Award

Heather M. Leary, a doctoral student at Utah State University's Department of Instructional Technology and Learning Sciences, was this year's recipient of the joint SIG-Advanced Technologies for Learning (ATL) and SIG-Learning Sciences (LS) Best Student Paper Award.

Her paper, titled "Expert Versus Novice Tutors: Impacts on Student Outcomes in Problem-Based Learning" came out of work she began as part of an Independent Study at Utah State and was presented this year in San Diego at AERA. Her coauthors were Andrew Walker, Melynda Harrison Fitt, and Brett Shelton.

"This paper looks specifically at the tutors (or teachers or facilitators) in problem-based learning environments," Leary said of the AERA paper. "Throughout the history of problem-based learning research, the recommended instructional role of the tutor, their academic and professional backgrounds, and their training as facilitators have all been debated. As problem-based learning expands outside of medical education, we felt it was impor-

tant to see how the different combinations of these tutor characteristics affect student learning outcomes. The most



interesting data that came out of the meta-analysis show that tutors defined as peers or mixed (peers and faculty) show student outcomes just as good as faculty tutors. This means we may be able to scale the use of problem-based learning as an intervention that is more cost effective. The data also appear to show that having tutors trained as facilitators improves student learning, but faculty members appear to be immune to training – the faculty are more likely to revert to traditional instructional methods if they believe the students are not learning what they need to."

Leary, et al.'s paper builds off of a recently published meta-analysis of student outcomes in problem-based learning. In light of the award, Utah State Univer-

sity Department of Instructional Technology and Learning Sciences Department Head, Mimi Recker said "Heather has been an exceptional student and researcher. We are all very proud of her and her coauthors for this achievement. This award has been a really great mechanism that we have had in place through SIG-ATL/LS to help recognize the scholarly accomplishments that graduate students, both here and at so many other institutions, are making as they prepare for their futures as learning scientists."

Recker, a member of the Best Student Paper committee, added, "This is the first time that one of our USU students has won this award, but hopefully not the last. Heather winning this award has been a great motivator for the other students in our program who are looking for ways to become more active in organizations like SIG-ATL/LS and ISLS."

In addition to Recker, the Best Student Paper committee includes Betsy Davis of the University of Michigan at Ann Arbor, Chrystalla Mouza of the University of Delaware, Joe Polman of the University of Missouri, St. Louis, and Iris Tabak of Ben Gurion University of the Negev (Israel).

This year's Best Student Paper Award was sponsored by SRI International. For her work, Leary was awarded a \$250 honorarium.

The Best Student Paper Award competition runs annually, and any graduate or undergraduate student member of the AERA SIG-ATL or SIG-LS may submit a manuscript for consideration.

Faculty and Researchers affiliated with ISLS are urged to recommend their students join one or both SIGs and apply for the award.

Deadlines for submission coincide with AERA's online paper submission deadline and are announced via the SIG mailing lists.

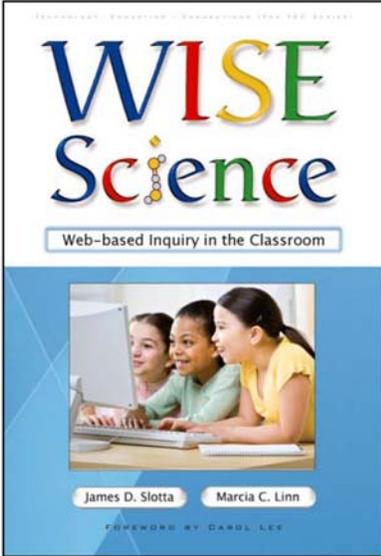
More information is available at

<http://itls.usu.edu/~mimi/sigaward/>

Book Announcements

CELEBRATING
100
YEARS

Teachers College Press
Teachers College, Columbia University



WISE Science: Web-based Inquiry in the Classroom

James D. Slotta and Marcia C. Linn
With a foreword by Carol Lee

“The approach to science topics in the WISE suite helps to situate scientific investigations to real world problems, helping students to understand not only the beauty but also the utility of science. With these opportunities comes the hope that more of our youngsters will learn to appreciate the wonder of science.” —From the Foreword by **Carol D. Lee**, School of Education and Social Policy, Northwestern University

This book shares the lessons learned by a large community of educational researchers and science teachers as they designed, developed, and investigated a new technology-enhanced learning environment known as WISE: The Web-Based Inquiry Science Environment. WISE offers a collection of free, customizable curriculum projects on topics central to the science standards as well as guidance for teachers on how these Internet-based projects can be used to improve learning and instruction in their science classrooms (grades 6–12). Hundreds of teachers and over 100,000 students have learned from WISE projects taught in English, Norwegian, Dutch, German, Hebrew, Chinese, and Korean. Highlights of WISE include:

- A wealth of findings about the WISE curriculum and assessments from 10 years of research funded by the U.S. National Science Foundation.
- A collection of classroom-tested, inquiry-based curriculum projects that are available to every classroom via the Internet, free of charge.
- An accumulation of successful practices, patterns, and principles to guide classroom teachers and curriculum designers.
- Effective models of professional development and school partnerships that support teachers in integrating inquiry-based methods in their own curriculum.
- Key strategies and recommendations for policymakers.

James D. Slotta is an associate professor of education in the Ontario Institute for Studies in Education (OISE) at The University of Toronto, where he holds the Canada Research Chair in education and technology.

Marcia C. Linn is professor of development and cognition specializing in education in mathematics, science, and technology in the Graduate School of Education at the University of California, Berkeley.

Technology, Education—Connections Series

April 2009 / 216 pp./ Pb., \$27.95, 978-0-8077-4949-4/ Cloth, \$62.00, 978-0-8077-4950-0

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Book Announcements



Edited by YASMIN B. KAFI, KYLIE A. PEPPLER, AND ROBBIN N. CHAPMAN

THE COMPUTER CLUBHOUSE

CONSTRUCTIONISM AND CREATIVITY IN YOUTH COMMUNITIES

Forewords by ROSALIND HUDNELL AND BARTON J. HIRSCH

“It is difficult to conceive of an after-school setting that would have a greater emphasis on positive youth development... Read [these chapters], appreciate what has already been accomplished, and consider the exciting possibilities for the future.” —From the Preface by **Barton J. Hirsch**, Northwestern University, author of *A Place to Call Home, After-School Programs for Urban Youth*

“As you will read in this book, the impact of the Computer Clubhouse on underserved youth around the world has been far-reaching, long-lasting, and life-changing.” —From the Foreword by **Rosalind Hudnell**, Intel Foundation

This book is about the Computer Clubhouse — the idea and the place — that inspires youth to think about themselves as competent, creative, and critical learners. So much

of the social life of young people has moved online and participation in the digital public has become an essential part of youth identities. The Computer Clubhouse makes an important contribution not just in local urban communities but also as a model for after-school learning environments globally. The model has been uniquely successful scaling up, with over 100 clubhouses thriving worldwide. Showcasing research by scholars and

evaluators that have documented and analyzed the international Computer Clubhouse Network, this volume considers the implications of their findings in the context of what it means to prepare youth to meet the goals of the 21st Century.

Book Features:

- ◆ A successful, scalable model for providing at-risk youth a rich array of media design and computing experiences.
- ◆ Diverse examples of media created in the clubhouse, ranging from digital stories, video games, interface designs, and digital art projects.
- ◆ Color photos of life in the clubhouse, including youth projects.
- ◆ Interviews with stakeholders in the clubhouse network, from the director to coordinators at various international clubhouses.

Yasmin B. Kafai is a Professor of Learning Sciences at the Graduate School of Education at the University of Pennsylvania.

Kylie A. Peppler is an Assistant Professor of Learning Sciences at Indiana University, Bloomington.

Robbin N. Chapman is a learning technologies consultant and serves as Manager of Diversity Recruitment for the MIT School of Architecture and Planning

Contributors: **Brenda Abanavas, Gail Breslow, Grace Chiu, Stina Cooke, Shiv Desai, Patricia Díaz, Rosaline Hudnell, John Maloney, Amon Millner, Jesse Moya, Mitchel Resnick, Natalie Rusk, and Elisabeth Sylvan**

Published by Teachers College Press

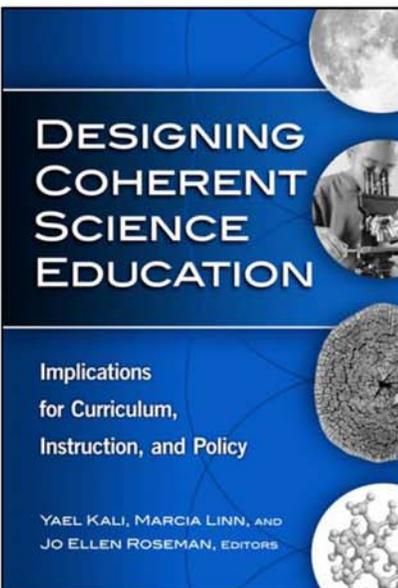
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Book Announcements



Designing Coherent Science Education: Implications for Curriculum, Instruction, and Policy

Edited by Yael Kali, Marcia Linn and Jo Ellen Roseman

"Things are certainly popping in the field of science education. That's why a comprehensive book like this is a must-read for everyone interested in the development of a coherent science curriculum."

—**James Trefil**, Clarence J. Robinson Professor of Physics, George Mason University, author of *Why Science?*

"Everyone involved with improving science education should read this book and heed its message. It is especially important for those involved in developing instructional materials, those charged with selecting materials to use in schools, and those who prepare teachers."

—**George D. Nelson**, Director, Science, Mathematics, and Technology Education, Western Washington University

"This volume is a harbinger for a new approach to improving science education. It is based on the best of a quarter century of curriculum development, improved by designs that are informed by current research, and powered by modern technology."

—From the Foreword by **Robert Tinker**, President, The Concord Consortium

This edited collection synthesizes current research on the most promising methods and models for designing coherent science instruction. Arising from the National Science Foundation-funded Delineating and Evaluating Coherent Instructional Designs for Education (DECIDE) project, this volume combines the insights of researchers from two Centers for Teaching and Learning. The book offers principles and criteria for design of instruction leading to coherent understanding of science. It discusses how courses can help students interpret contemporary scientific dilemmas like global warming and take full advantage of technology. Too often in today's science classes, students learn isolated facts rather than connections among ideas and are unprepared to apply scientific thinking and principles outside of checking off answers on standardized tests. *Designing Coherent Science Education* demonstrates how effective instruction prepares learners to connect scientific principles to the schoolyard and beyond.

Designing Coherent Science Education offers policy recommendations to transform science courses so that they meet the needs of all students and lure more students into scientific careers. The collection further addresses how to use technology in the classrooms to design coherent science instruction.

Contributors include Roy Pea, Allan Collins, Joseph Krajcik, Jim Slotta, Elizabeth Davis, Jane Bowyer, and George DeBoer.

Yael Kali is a senior researcher at the Department of Education in Science and Technology, Technion—Israel Institute of Technology. **Marcia C. Linn** is a professor of development and cognition specializing in education in mathematics, science, and technology in the Graduate School of Education at the University of California, Berkeley. **Jo Ellen Roseman**, director of Project 2061, has been involved in the design, testing, and dissemination of Project 2061's science literacy reform tools since 1989. She directs the NSF-funded Center for Curriculum Materials in Science (CCMS).

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Newsletter #10

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Elena Kyza
(elenakyza@gmail.com)

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