

Educational Technology

Fall 2009 Newsletter

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Let us hear from you!

We want to know what you are doing and how we can keep in touch. Please drop us a note to let us know where you are and how you are doing. The Educational Technology family continues to grow, and we want to find new ways to keep connected.

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Update from the Ed Tech Program

It is time once again for our annual update, the fall newsletter for alumni and friends of the Educational Technology program at Purdue University. Hello and best wishes from West Lafayette!

The university is continuing work on its latest strategic plan, New Synergies, which was approved just over a year ago; see www.purdue.edu/strategic_plan/. Although the economic situation has created

challenges, the university is continuing to pursue its overarching goals to prepare tomorrow's leaders, promote discovery with delivery, and meet global challenges.

Here in the College of Education, we welcomed a new dean this summer. Maryann Santos de Barona came to Purdue from Arizona State University where she served as an associate dean. She helped to oversee the finalization of the college's

new strategic plan, which is now available at www.education.purdue.edu/sp/.

In the Educational Technology program, we are continuing to pursue our ongoing projects and the preparation of educational technology professionals. In this issue, we'll bring you up to date about our latest activities and new developments in the program. We hope you enjoy this issue!

What's in a Name? Help Us Decide!

In our first fall newsletter, two years ago, we recalled that the Educational Technology program has its roots in a library and media sciences program that dates back to the 1960s. In the mid-1970s, the program faculty shifted the focus of the program to instructional design.

In the mid-1980s, an emphasis on educational computing was added with new licensure and degree programs, and the program was named Educational

Computing and Instructional Development (ECID).

In the late 1990s, degree programs were redesigned and the faculty renamed the program Educational Technology. This change reflected the trend toward merging of specializations in the field.

Now, we are thinking about changing our moniker once again. In keeping with today's increasing focus on learning, we are considering a name change to emphasize our role

in the design of learning experiences and learning through use of technology.

The following have been proposed as possible program names:

- (1) Learning Design and Technology;
- (2) Learning, Design, and Technology; or
- (3) Educational Technology.

Which do you think best reflects what we (and you) do? E-mail your vote to: edtech@education.purdue.edu



Peg Ertmer

Expert Instructional Design Thinking

Peg Ertmer has completed a series of studies examining differences between expert and novice instructional designers and how strategies impact novices' performance when solving ill-structured ID problems. This research, in collaboration with Dr. Don Stepich (PhD, 1989) and with students enrolled in Dr. Ertmer's advanced research course, has led to important implications for ID education.

One key finding is that a core element of expert thinking in ID is the ability to synthesize, i.e., to abstract the central issues from an ill-structured problem situation. This ability to synthesize can be scaffolded, that is, students can be directed to perform more like experts.

To facilitate the development of this synthesizing ability, ID educators can:

- Help students accumulate experiences in varied ID situations that impose different constraints;
- Help students develop multiple "rich" ways to index their accumulating experiences; and
- Scaffold or guide students' efforts to synthesize a given problem situation along with their ability to communicate with others.



Minchi Kim

For more information, see persist.education.purdue.edu/

PERSISTent Research

Minchi Kim, with assistance from Peg Ertmer, directs PERSIST (Purdue Educational Research in Scientific Inquiry and Scaffolding Technology), a research team of 6 graduate students from Ed Tech and Science Education that has partnered with local middle and high school teachers to

design and implement web-based, inquiry-oriented curricular materials with simulations in science classrooms.

The group has received awards in recognition of its innovative, interdisciplinary research including: the 3rd

Annual Graduate Education Research Symposium Best Paper Award, AECT Featured Research Paper Award, and Purdue Research Foundation Grant.

Science teachers interested in participating in this project, email: mminchi@purdue.edu.



Scott Schaffer

Effective Healthcare Practices

Scott Schaffer, faculty member in Educational Technology and affiliate of the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue, has received a new grant from RCHE to extend on-going work on the evaluation of VHA clinical improvement services and how effective practices can be disseminated to healthcare institutions.

Improving healthcare practices across the entire healthcare system in the U.S. requires understanding how hospitals perform patient care and what systems are in place to support improvements. Dr. Schaffer's research will examine what is currently being done to support the spread of evidence-based practice among hospitals in healthcare

networks.

This work will dovetail with Dr. Schaffer's previous work in RCHE, which has involved the Health Informatics and Learning Technologies (HILT) group. HILT has focused on developing effective patient-provider interactions supported by information and communication technologies.

Jennifer Richardson and Peg Ertmer are finishing the last year of work on their Fund for the Improvement of Post-Secondary Education (FIPSE) project, which is investigating the effects of the use of peer feedback in online discussions.

A substantial outcome of the project is the development of a tool, created in collaboration with Blackboard, that supports providing peer feedback using Amazon-like ratings.

The peer feedback process has been tested in multiple discipline areas (Education, Engineering, English, Veterinary Medicine, and Speech and Hearing Science) and is being implemented in two graduate-level courses (Educational Psychology and Curriculum & Instruction) this semester.

Results from a recent analysis of data demonstrates that after participating in the peer feedback process, students perceived higher levels of

confidence and comfort across online discussion components than those that did not participate in the peer feedback process.

On another front, Ed Tech's proposed online master's degree program, led by **Tim Newby's** efforts, has received approval from Purdue and the Indiana Commission for Higher Education. After one more regulatory hurdle is cleared, the program will be set to launch in Fall of 2010.



Jennifer Richardson

With colleague Phil Ice, Jennifer is receiving an Effective Practice Award from the Sloan-C Consortium at their annual meeting in October.

INSITE Project Focuses on Web 2.0



Tim Newby

Read more about the INSITE project at news.uns.purdue.edu/x/2009a/090417NewbyWeb.html

Tim Newby, convener of the Educational Technology program and instructor of EDCI 27000, the introductory educational technology course taken by all teacher education students at Purdue, has spearheaded an exciting new initiative in the course. The project, International Network of Students Investigating Technologies for Education (INSITE), involves teams of students working together to investigate educational applications of emerging Web 2.0 technologies.

Each team of students from EDCI 27000 is charged with the task of learning about a particular Web 2.0 technology (e.g., Facebook, Google Docs, Flickr, Zoho) and

developing an online resource, a wiki book chapter, about that resource. Each student team also prepares a presentation about their technology for an end-of-semester showcase.

A special feature of the project is international collaborations. Students studying educational technology in various other countries (including Australia, Singapore, and China) work with the teams of EDCI 27000 students to bring an international perspective to the discussions of Web 2.0 technologies and their educational applications. The U.S. students work with their international partners using the Internet and video conferencing technologies.

Project INSITE is blazing new trails in the College and at Purdue. It is the first program at Purdue to provide all students in the college (in fact, all teacher education students) with an international experience.

The project has received support from Information Technology at Purdue (ITaP) as well as the Office of International Programs. During this past summer, Tim traveled to England, Ireland, and Sweden to make connections with additional international partners who will participate in future iterations of the project.



Jim Lehman

For more information, see <http://cs4edu.cs.purdue.edu>

Preparing Computer Science Teachers

Jim Lehman, Ed Tech faculty member and head of Curriculum & Instruction, is Co-PI of a new grant project from NSF that is focusing on getting future teachers prepared to teach computer science in high schools.

Nationwide, student interest in computer science is waning at both the collegiate and high school levels. Yet, the need for people with

computer science training is greater than ever and job opportunities abound.

The project, dubbed CS4EDU, will address the issue by getting more education majors prepared to teach computer science. CS4EDU is headed by Suzanne Hambrusch, Professor of Computer Science, and includes other faculty in both Computer Science and the

College of Education.

The project seeks to develop a computer science teaching supplemental licensure program to prepare secondary computer science teachers. As part of the project, modules will also be developed to introduce computational thinking concepts to all education majors through courses such as EDCI 27000.



Bill Watson

For more information, see seriousgames.education.purdue.edu

Game Design

Bill Watson, Director of the Purdue Center for Serious Games and Learning in Virtual Environments, is developing *National Pastime*, an educational game for middle and high school students that focuses on communicating the internment experience of Japanese-Americans during World War II. Development

of the game will begin in January with support from the Entertainment Software Association (ESA) Foundation.

National Pastime is a citizenship education video game designed to teach about the internment of Japanese-Americans in the U.S. during World War II. In the game,

players take on the role of a child, an American citizen forced to live in an internment camp due to Japanese heritage. The game also intertwines baseball, one of the sole forms of recreation for those in the camps. The game is designed to engage students with their roles as citizens in a democracy.



Johannes Strobel

For more information about INSPIRE, see www.purdue.edu/inspire

Engineering the Future

Johannes Strobel, Engineering Education faculty member with a joint appointment in Educational Technology, has been named the Director of INSPIRE, the Institute of P-12 Engineering Education and Research. INSPIRE, created with a grant from Bechtel, focuses on the design, implementation, and assessment of engineering activities for

students in grades P-6. The institute also provides a summer academy to train teachers who want to integrate engineering concepts in their classrooms.

Johannes is also the PI on an NSF DR-K12 grant project that extends the work of INSPIRE through the use of a cyber-infrastructure with video-based mentoring that

links elementary school teachers with Purdue researchers and educators to form a community of practice related to engineering education. The professional development component of the project seeks to transform teachers into master users and designers of engineering education for elementary learners.



Chris Mong is the recipient of a Frank B. DeBruicker Graduate Scholarship for 2009-10



Jun Fang (left) and Constance Harris (right) were winners at the Annual Graduate Students Educational Research Symposium. Constance is also receiving an AECT scholarship this year.



Cindy York won department, college, and university graduate teaching awards and a Dean's Doctoral Scholarship.

A number of Ed Tech faculty members and students will be attending the AECT conference in Louisville, October 28-31. If you plan to be there, please look us up and say hello!

Chris Mong, Ph.D. student in Ed Tech, is the recipient of a 2009-10 Frank B. DeBruicker Graduate Award. This award, which provides \$1000 for a graduate student in Ed Tech who demonstrates research excellence, was established by the DeBruicker family in honor and memory of their father, Frank.

Jun Fang and **Constance Harris**, both Ph.D. students in Ed Tech, were selected as winners of the research poster competition at Purdue's 2009 Annual Graduate Student

Educational Research Symposium. Constance will also receive the 2009 McJulien Scholarship Award at AECT.

Cindy York, Ph.D. student in Ed Tech, won department and college Outstanding Graduate Teaching Awards for 2008-09. She was also recognized as one of only four students campuswide to win the university's prestigious Graduate School Excellence in Teaching Award for 2009. Cindy is also a recipient of a Dean's Doctoral Scholarship for 2009-10.

IJPBL

The *Interdisciplinary Journal of Problem-Based Learning*, edited by Peg Ertmer, is now publishing its third volume.

The last issue of the journal, volume 3 number 1, was a special issue devoted to the efficacy of PBL. Another special issue, focusing on PBL

in Engineering Education, is slated for the first issue of volume 4.

To learn more about IJPBL, visit the journal website at: <http://www.ijpbl.org>.

Help Support Ed Tech

Are you interested in helping to support the efforts of the Ed Tech program? If so, we may have an opportunity for you! In the coming months, we'll be creating an external advisory board. Let us know if you are interested in being

involved.

In addition, please consider making a tax-deductible donation. Your support would mean a lot! You can donate specifically to the Ed Tech program by specifying

that your gift go to the ECID Gift Fund. These funds support things such as graduate student travel to professional conferences, recruiting activities, seed funding for research projects, and more.

For more information, see [www.education/purdue.edu/about_us/giving.html](http://www.education.purdue.edu/about_us/giving.html)