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An Invitation to Join an Early Career Mentoring Network in Technology and Teacher Education

<u>Glen Bull</u> and <u>Lynn Bell</u>, Editors Contemporary Issues in Technology and Teacher Education

> Ann Thompson, Editor Journal of Computing in Teacher Education

<u>Lynne Schrum</u>, Editor Journal of Research on Technology in Education

<u>Debra Sprague</u>, Editor Journal of Technology and Teacher Education

> <u>Cleborne Maddux</u>, Research Editor <u>Computers in the Schools</u>

> > <u>Kara Dawson</u> University of Florida

Gerald Knezek University of North Texas

The spring 2005 edition of the *Journal of Research on Technology in Education* (JRTE) issued a call for a proactive approach to a research agenda in educational technology. This position paper was collaboratively authored by the editors of six <u>educational technology journals</u> working together under the auspices of the <u>National Technology Leadership Coalition</u> (NTLC). (*Editor's note:* URLs for all Web sites are located in the <u>Resources section at the end of this editorial.)</u>

This call for a proactive approach was prompted by widespread acknowledgment that a more organized and persuasive body of evidence on the benefits of digital technologies in schools is needed. A subsequent editorial by the NTLC editors in the *CITE Journal* concluded, "Our most pressing objective is to identify how we can assist the coming generation of young researchers in carrying out research that is needed, relevant, rigorous, and influential in the formulation of educational policies in schools" (Schrum et al., 2005)

Establishment of an Early Career Mentoring Network to facilitate this effort was suggested as one strategy to address this need. It was envisioned that this effort would combine collaborative technologies such as shared audio and video conferencing, shared

Web logs (blogs), social book marks, and <u>RSS syndication</u>, with related activities such as "fireside chats" with leaders in the field at associated professional meetings. The objective is to provide a venue for dialog and debate among editors, teacher educator leaders, and, most importantly, researchers in the beginning stages of their educational technology careers.

Consequently, the establishment of the Early Career Mentoring Network is now under way. At the same time, there is a parallel effort sponsored by the SITE Research Committee to collaborate with peer teacher educator associations representing the core content areas to identify the most pressing issues related to technology in each discipline. The outcome of these efforts will thus represent the intersection of editors, content associations, and young researchers regarding research agendas needed to advance the field.

Origins of an Early Career Mentoring Network

The elements of an Early Career Mentoring Network combine a series of convergent activities. This effort originated in a keynote panel at the SITE 2005 conference, "Establishing a Proactive Research Agenda for Educational Technology," chaired by Lynne Schrum. This was followed by subsequent panels at the American Educational Research Association (AERA) conference and at the National Educational Computing Conference (NECC). This series of panels provided a venue for dialog and debate among the NTLC editors and young researchers at the beginnings of their careers.

The NTLC editors discussed conclusions stemming from this series of findings at the National Technology Leadership Summit (www.NTLS.info) in fall 2005. Some of the conclusions are summarized in an editorial in the previous issue of the *CITE Journal*, "Advancing the Field: Considering Acceptable Evidence in Educational Technology Research" (Schrum et al., 2005), including recommendations for establishing a mentor network.

Key Research Issues

The twin goals of a mentor network are to facilitate the careers of the next generation of researchers while at the same time advancing the research agenda judged critical by representatives and partners from the 10 NTLC educational associations. The SITE Research Committee working in concert with representatives from the technology committees of the teacher educator associations representing the core content areas launched an initiative to identify key research issues related to technology in each discipline.

An overview of these deliberations will be published in the May 2006 issue of *Learning* and *Leading with Technology*. More detailed discussion will be published in subsequent issues of the *CITE Journal* and other NTLC journals.

The Early Career Mentoring Network provides an opportunity to acquaint young researchers in the field of technology and teacher education with research issues that teacher educator associations judge to be of critical importance and to provide these young researchers with an opportunity to share their own scholarly problems and concerns with established researchers. This addresses a long-standing concern that there is insufficient dialog among the disciplines, articulated in a prior editorial, "Technology and Teacher Education: Are We Talking to Ourselves?" by <u>Debra Sprague (2004)</u>.

Elements of an Early Career Mentoring Network

The network was conceived as a blended series of physical and virtual opportunities for interactions by the NTLC editors and other educational leaders with researchers at the beginning stages of their careers. The elements include the following:

- A series of editorials and related articles and commentary in participating NTLC journals such as this one.
- Panels and physical interaction at the annual meetings of the educational technology associations such as SITE, AERA, NECC, and the teacher educator content associations such as ASTE, AMTE, CUFA, and CEE.
- Annual awards to encourage and identify exemplary papers in technology and teacher education jointly sponsored by SITE and the teacher educator content associations.
- Electronic meetings via videoconferences and synchronous chat on electronic forums such as TappedIn.
- Podcasts, streaming videocasts, and transcripts of interactions from all of the above to make these interactions as widely available as possible.
- Collaborative seminars designed to facilitate interactions across teacher education programs among graduate students whose careers are focused on technology and teacher education.
- The SITE Early Career Mentor Network blog to provide a locus for ongoing interactions, as well as a record of this discourse.

Conference Connections

A number of opportunities for dialog will be offered at annual meetings of conferences in the coming year.

The chairs of the SITE Research Committee, Gerald Knezek and Rhonda Christensen, will offer an invited panel at the 2006 SITE conference titled, "Facilitating Effective Technology Research in the Core Content Areas."

The panel includes the chairs of the SITE committees on Mathematics, English/Language Arts, Social Studies, Science, and Elementary Education. The chair of each of these committees also serves as a member of the technology committee for the corresponding teacher educator content association (e.g., Janet Swenson chairs the SITE English Education committee and also serves as a member of the NCTE Conference on English Education technology committee). This dual representation is designed to ensure dialog across associations and across disciplines. The panel, therefore, provides a convenient site for researchers to identify and discuss key research issues related to technology in each of these disciplines.

This panel is mirrored by a parallel panel of NTLC editors chaired by Lynne Schrum, offering a session titled, "Facilitating Effective Technology Research in the Core Content Areas." The focus of this panel is research and publication that addresses the research issues identified by the SITE Research Committee working in concert with technology committees in partner associations.

Later an informal session chaired by Lynne Schrum provides an opportunity for followup discussion and discourse: "Fireside Chat: Transitions to Academia: Research, Scholarship, and the Professoriate." A subsequent session chaired by Debra Sprague provides advice on ways to employ a conference paper as the foundation for a subsequent article submitted to a refereed journal: "Transitions to Academia: Publishing in the Journal of Technology and Teacher Education (JTATE)." This session will be followed by subsequent opportunities for prospective authors to interact with the editor of JTATE on interactive electronic sessions on TappedIn. (See appendix for a summary of these events)

Subsequent conference sessions on these topics are also planned for AERA, sponsored by the TACTL SIG, and at NECC, jointly sponsored by SITE and the ISTE Teacher Education SIG. Further updates will be posted on the Early Career Mentor blog (discussed below).

Establishing an Interactive Infrastructure

Professional interactions at conferences offer an important communication channel. A carefully planned sequence of conference opportunities is central to establishment of a career mentoring network for the field of technology and teacher education.

Ongoing electronic interactions offer a means of extending the professional connections established at conferences. Evidence suggests that online collaborative networks rarely form spontaneously. A thoughtful approach is also required to sustain successful collaborative networks.

New collaborative tools are emerging daily, requiring analysis to identify an effective mix of communication technologies. An even more significant challenge involves development of shared social protocols and understandings. To facilitate establishment of an initial infrastructure, a collaborative seminar was established for graduate students at the University of Virginia, the University of Florida, and Iowa State University. Approximately 10 students from each institution participated in the seminar. Graduate students from these programs had successfully collaborated on previous crossinstitutional initiatives, providing a context for this effort. The objective of the crossinstitutional seminar on technology in teacher education was to identify appropriate technological infrastructure and to model its use in an initial pilot.

Editors of educational technology journals at these institutions served as advisors and consultants. Other NTLC editors served as external consultants, participating in the development process and guiding its inception.

SITE Early Career Mentor Network Blog

The SITE Early Career Mentor Network blog was established to offer a common locus for interactions among the NTLC editors and researchers at the beginning stages of their careers – specifically, doctoral students and assistant professors who have chosen technology and teacher education as a career focus. The mentor blog is open to anyone who chooses to participate, and is available at www.SITEmentor.blogspot.com

Collaborative seminars were established at the host institutions for several of the NTLC editors to identify effective channels of communication and collaborative methods for supporting this interaction. Other NTLC editors contributed through participation in the blog and parallel activities such as cross-institutional videoconferencing sessions.

At a minimum, this dialog provides a venue for addressing basic recurring questions such as, "Can a conference paper be published in a journal?" Participation by editors representing multiple journals and publication outlets provides a diverse perspective:

Debbie Sprague replied ...

The short answer to your question is "yes, conference papers can be published in journals." Publishing a conference paper is the same as publishing any article in a journal. The place to start is to read the journal.

The CITE Journal published a wonderful article last year on how to get published, titled <u>"From Manuscript to Article: Publishing Educational Technology Research"</u> by D.S. Niederhauser, K. Wetzel, & D. L. Lindstrom. JTATE re-published the article this year. It offers a good place to start learning about the publishing process.

Ideally this effort provides a mechanism for richer discourse that will ultimately lead to needed research advancing the field while simultaneously facilitating the careers of participating researchers. Even in the preliminary stages this has offered a venue for dialog among the initial group of participants.

Breaking down walls with blogging

Tom Hammond said...

Debbie Sprague has mentioned the 'talking to ourselves' phenomenon: lots of preaching is to the choir, especially in ed tech. SITEmentor breaks down one wall (editors + advisors || grad students/neophytes), but there are other walls to this box. For example, down the road, a network that draws together content-area people + ed tech people would be another step forward.

One final comment: In my undergrad teaching-with-tech class, students have blogs, and sometimes blog during class. This lets me see more than just the tip of the iceberg of their thinking (i.e., what they verbalize in class) and gives me more access to their thinking -- what was important, what was (perceived as) foolish, what was confusing, and where they heard the wrong message. The SITEmentor blog must be like that for the professors and editors -- when we post, they get a better grip on what's in our heads. In the long run, this makes us both better off.

Roger Geyer said...

I liked Tom's metaphor of walls that need broken down, particularly the IT – content issue. To extend the metaphor a bit, we still seem to be working on one side of the wall (talking to ourselves?) while our partners in truly understanding what works in the classroom, remain on the other side.

I am wondering whether we could also begin to search out interested teachers who may very well be able to help guide us in identifying relevant research questions that, once answered, will lead to effective change in the classroom. As beneficiaries of solid research leading to technology fueled instructional enhancements in their own classrooms, they've always played a stakeholder role in advancing the field through authentic research.

The SITE Mentor blog has also served as a springboard that has generated ancillary blogs for discussion of specific papers and works in progress. Ann Thompson notes that "this process has been very useful for students preparing papers for publication," noting in particular the useful feedback received by a graduate student during the process of revising a paper accepted for publication in JRTE.

The process of establishing effective electronic dialog and discussion in an emergent Web 2.0 environment offers scope for study in itself. It is increasingly becoming the practice to access blogs through a blog reader such as <u>Bloglines</u>. These tools make it easy to subscribe to syndicated feeds from a range of blogs, but only display the topic and a sentence or two from each post on the blog in the following fashion:

• Publication o utlets

There was some "back channel" discussion about creating a taxonomy of publication outlets for our field ...

• Collaborative Conference Tools?

The use of parallel tools (such as chat) to accompany a conference call is characteristic of the evolving Web 2.0 environment. Clay Shirky provides a good example ...

Conversation with JRTE Editor

Lynne Schrum, editor of the Journal of Research on Technology in Education (JRTE), first suggested a proactive approach to early career mentoring ...

• Electronic Portfolio Research

Currently I'm involved in a project of studying the implementation of electronic portfolio ...

Beginning users who are not yet reading blogs through this type of aggregator may not be aware of the need to employ a topic heading matching the subject of the post to help readers identify entries pertinent to them. Current blog readers typically do not indicate when additional comments have been posted in a thread, which also affects the way in which discourse evolves unless readers are aware of this characteristic.

The syndication protocols underlying this distribution network are also undergoing revision and change, so best practices may evolve as the underlying technology and social practice change. To ensure effective interactions, it is important to acquaint participants with the characteristic of the medium. Beyond that, this area may serve as a topic of research in itself. Who better than the next generation of educational technology researchers to undertake research on ways of best integrating emerging capabilities in their own profession?

Interactive Conferences

Synchronous conferences offer another opportunity for interaction. The NTLC editors have offered a series of videoconferences in concert with the pilot collaborative seminars. This has been employed as an opportunity to explore characteristics of the medium for collaboration across programs.

One example of this exploration involves pilot use of parallel communication channels during multi-site videoconference sessions. <u>Clay Shirky</u>, a faculty member in the Interactive Telecommunications Program at New York University, describes parallel use of chat and a wiki during a conference call:

It's very difficult to coordinate a conference call ... In Joi's conference call, the interrupt logic got moved to the chat room. People would type 'Hand,' and the moderator of the conference call will then type 'You're speaking next,' in the chat. So the conference call flowed incredibly smoothly.

"Meanwhile, in the chat, people are annotating what people are saying. 'Oh, that reminds me of So-and-so's work.' Or 'You should look at this URL...you should look at that ISBN number.' In a conference call, to read out a URL, you have to spell it out -- 'No, no, no, it's w w w dot net dash...' In a chat window, you get it and you can click on it right there. You can say, in the conference call or the chat: 'Go over to the wiki and look at this.'

One participant in an early SITE Mentor videoconference commented,

I for one found the parallel tool such as TappedIn [i.e., chat] useful. It allowed for the recording of additional questions that came up during the video conference but did not get asked – however, a record now exists and can be used for follow-up communication.

However, perhaps reflecting the divide between digital natives and digital immigrants, a faculty advisor reflected,

I personally enjoyed the back channel conversation because I tend to "drift" when not directly involved in a conversation. However, I wonder if I gave the primary discussion enough attention. I assume others with different learning styles found this additional conversation distracting or possibly even annoying.

Extending the Community

The experience gained through this practice will be extended to mentoring sessions planned for the SITE and AERA conferences. Students attending these conferences will provide live blog and chat updates during these sessions, allowing students at remote sites to post questions for moderators as the session is taking place. These postings will also provide a record of the session and a foundation for continued interactions after the conference.

The intent is to make the discourse accessible to as many researchers at the beginning stages of their careers as possible. For that reason, podcasts and transcripts of sessions will also be posted on the Early Career Mentor blog whenever possible.

Wide accessibility to researchers in the early stages of their careers is of obvious importance. It is essential to keep the Mentoring Network and all initiatives connected to improving the research agenda completely open to new individuals. This would seem to go without saying, but is a difficult feat for any group. Scholarly organizations across all disciplines struggle to avoid appearing to be a closely knit, closed group and to keep membership and leadership positions open to newcomers. Even loosely knit, collaborative groups such as the Mentoring Network must take steps to encourage and welcome new participation. Communication across multiple outlets and by a combination of collaborative technologies is important in this regard, as are continuing recruitment efforts aimed at young researchers.

This editorial also potentially serves as an anchor point for continued discourse. Before blogs were widely used, a commentary feature was designed and incorporated into the structure of the *CITE Journal*. This provides a mechanism for follow-up commentaries that extend a dialog that begins with an initial article such as this one. The chief difference between a commentary in the *CITE Journal* and a commentary in a blog is that commentaries in the journal are peer reviewed, since they are conceived as scholarly documents. However, the philosophical intent is the same.

Thus, this editorial provides an opportunity for those who wish to advance scholarly dialog to publish follow-up commentaries extending the conversation, in an exercise in group participation. The editors of the *CITE Journal* and associated NTLC editors and educational leaders welcome such submissions, and will publish the best of the commentaries received on this subject in future editions.

An Invitation to Join the Early Career Mentor Network

The Early Career Mentor blog provides a site for discussion of potential submissions and other contributions. We invite interested readers to join the mentor blog, found at www.SITEmentor.blogspot.com

In particular, faculty advisors for doctoral students whose career focus involves technology and teacher education are invited to call this resource to their students' attention. Tenure-track faculty members in the early stages of their careers are also particularly welcome and invited to contribute to this dialog.

If we are successful, the outcome will be measured in increased levels of research that advances the discipline. We welcome all who share this goal.

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Resources

Bloglines - http://www.bloglines.com/

National Technology Leadership Coalition - http://www.ntlcoalition.org/

NTLC educational associations - http://ntlcoalition.org/societies.html

NTLC journals - http://ntlcoalition.org/editors.html

RSS syndication - http://en.wikipedia.org/wiki/RSS (protocol)

Appendix

Summary of Mentoring Events at SITE 2006

"Facilitating Effective Technology Research in the Core Content Areas" Invited panel chaired by Gerald Knezek and Rhonda Christensen

"Facilitating Effective Technology Research in the Core Content Areas" Invited panel chaired by Lynne Schrum

"Fireside Chat: Transitions to Academia: Research, Scholarship, and the Professoriate"

Lynne Schrum

"Transitions to Academia: Publishing in the Journal of Technology and Teacher Education (JTATE)"

Debra Sprague

Author Info:

Glen Bull University of Virgina gbull@virginia.edu

Lynn Bell University of Virginia lynnbell@virginia.edu

Ann Thompson Iowa State University eat@iastate.edu

Lynne Schrum
The University of Utah
Lynne.Schrum@ed.utah.edu

Debra Sprague George Mason University dspragu1@gmu.edu

Cleborne Maddux University of Nevado-Reno maddux@unr.edu Kara Dawson University of Florida dawson@coe.ufl.edu

Gerald Knezek University of North Texas gknezek@gmail.com

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