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Welcome to the future: ijCSCL volume 2

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An advance in the field of CSCL

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The start of a second year of *ijCSCL* marks a significant step forward in the history of the CSCL research field. The journal is not just a venue for academic papers, but a medium of discourse about new directions and new understandings within an active community exhibiting diverse perspectives.

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The journal has not merely persisted for a full year/volume; it has been adopted by the CSCL community as an important voice. Almost a hundred papers have been submitted to the journal from around the world, covering all aspects of CSCL theory, methodology, technology and practice. A total of two hundred researchers have volunteered to be reviewers, including an illustrious Editorial Board of 42 people. Many of the submitted papers expand on exceptional presentations from CSCL conferences, workshops and research labs. The paper that won the "European CSCL Award for Excellence in the Field of CSCL Research" at January's CSCL SIG rendezvous in the Swiss Alps (Arnseth & Ludvigsen, 2006) was published in *ijCSCL*.

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Like a meeting or a conference, a journal can provide a place to communicate what is going on in a community. Meetings and conferences, however, permit certain kinds of informality and direct interaction with the audience. So it is natural to concentrate on meetings and conferences when a field like CSCL is starting to develop. When a journal becomes part of the community's communications, more formal ways of presenting assumptions, theories and outcomes start to take prominence. Journal articles reflect more mature research efforts, more intense peer review and more rigorous editing than conference papers.

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During the first year of *ijCSCL*, a highly engaged Editorial Board and additional reviewers from the field did an exceptional job of carefully reading the submitted papers

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and providing deep and detailed constructive advice to improve the papers. Virtually all 40
published papers went through extensive critique and revision. Although it may not be 41
visible to most readers, all papers had clearer organization and stronger arguments as a 42
result of the review process—even though they may have been based on conference papers 43
or dissertations that had already benefited from a great deal of review and editing. In 44
addition, the many papers that could not be published in *ijCSCL* each received several 45
detailed reviews, helping their authors to learn from the experience and to understand what 46
was needed for future publication. In such ways, the journal also serves as a means for 47
mutual assistance within the community—for community-based collaborative learning. 48

The journal is thus both an avenue of more formal communication than conferences and 49
a special form of interaction between authors and reviewers. This kind of anonymous 50
interaction and critique can be more frank and detailed than at a conference. If *ijCSCL* 51
serves these dual purposes of publication and feedback, then its first anniversary marks a 52
real start to advancing the field. 53

The CSCL research community supports ijCSCL 54

As we start to publish our second volume of *ijCSCL*, the Board of Editors would like to 55
thank all the members of the CSCL community who have supported the journal through its 56
first year. The following researchers contributed reviews to *ijCSCL* to date: 57

Shaaron Ainsworth, Hans Christian Arnseth, Daniel Bodemer, Jürgen Buder, Murat 58
Perit Cakir, John M. Carroll, Carol K.K. Chan, Elizabeth Charles, Cesar Alberto 59
Collazos, Charles Crook, Lucilla Crosta, Lone Dirckinck-Holmfeld, Nathan Dwyer, 60
Noel Enyedy, Brian Foley, Andrea Forte, Hugo Fuks, Frode Guribye, Päivi Häkkinen, 61
Christine Joyce Howe, James Hudson, Patrick Jermann, Richard Joiner, Christopher 62
Jones, Regina Jucks, Yael Kali, Victor Kaptelinin, Manu Kapur, Andrea Kienle, 63
Minna Lakkala, Victor Lally, Nancy Law, Lasse Lipponen, Jacques Lonchamp, Rose 64
Luckin, Johan Lundin, Richard Medina, Anders Mørch, Daisy Mwanza-Simwami, 65
Jun Oshima, Ruediger Pfister, Janet Read, Peter Reimann, Jochen Rick, Tim Roberts, 66
Nikol Rummel, Nadira Saab, Johann Sarmiento, Wesley Shumar, Jan-Willem 67
Strijbos, Berthel Sutter, Gustav Taxén, Ramon Prudencio Toledo, Jan van Aalst, 68
Ravi Vatrapu, Marjaana Veermans, Jim Waters, Rupert Boudewijn Wegerif, Gordon 69
Wells, Martin Wessner, Tobin Frye White, Joyce Yukawa, Nan Zhou. 70

Along with the members of the Editorial Board, these reviewers not only determined 72
what was selected to publish in the journal and gave valuable insights to all submitting 73
authors, they also contributed significantly to guiding the major revisions through which all 74
accepted papers passed before being published. In this way, the community establishes the 75
content and tone of the journal. 76

We look forward to thanking you in person for your support and your interest in *ijCSCL* 77
at the international conference of CSCL 2007 at Rutgers University, New Brunswick, NJ, 78
USA, near New York City, July 16–21 (see http://www.isls.org/cscl2007 for details). 79

Flash themes in CSCL 80

As mentioned in the introduction to issue 2 of volume 1, a number of workshops on topics 81
in CSCL proposed developing special issues for *ijCSCL*. These were not topics solicited by 82

the *ijCSCL* Editorial Board, but arose out of the work and concerns of practitioners. They are themes which "flashed" up in the field through a kind of spontaneous combustion of hot topics, stirred up by experiences in the wild. Responding to these openly and welcoming such suggestions has been a way for *ijCSCL* to give voice to the concerns of the field in a timely and flexible way and to stay at the leading edge of a rapidly evolving discipline.

This year, *ijCSCL* begins to publish papers on these flash themes. Reviews of papers on these themes are being coordinated by Associate Editors of *ijCSCL* (as indicated in parentheses below) in a move to broaden editorial responsibilities as the journal becomes more established. Future issues will include papers on the flash themes of:

- Scripting in CSCL (reviews coordinated by Barbara Wasson)
- Methods for Evaluating CSCL (Claire O'Malley)
- Graphical Support for CSCL (Daniel D. Suthers)

In this issue, two papers on the theme of "Learning in Communities" are published. They arose out of a workshop by that name organized by Jack Carroll and Chris Hoadley at Penn State University (USA), August 14–17, 2006. The workshop was attended by 29 researchers, mostly from North America, and was sponsored by the NSF (grant IIS-0511198). A report on the workshop itself appeared previously in the *Journal of Community Informatics* (Carroll & Bishop, 2005). Six other papers derived from the workshop are under review for the *Journal of CSCW*. The workshop at Penn State built on related workshops at ICLS 2004 and CSCL 2005, which resulted in special issues in the *ACM SigGroup Bulletin* (Klamma, Rohde, & Stahl, 2004) and in *Behavior & Information Technology* (Rohde, Wulf, & Stahl, 2006).

Computer-supported community-based learning

Lave and Wenger (1991) brought home the importance of "communities of practice" (CoPs) for learning. In this issue, we have a pair of articles investigating the role of communities in learning within contemporary institutions. Together, they suggest a specific form of CSCL, where the term "collaborative" is specified as referring to collaboration that is "community based" in the sense of CoPs providing socio-cultural contexts in which collaborative learning can take place. They illustrate community-based learning related to the university and related to what in the USA are known as non-profit organizations and elsewhere as non-governmental organizations (NGOs). By publishing these articles, we bring considerations from CSCW (computer-supported cooperative work) and HCI (human–computer interaction) into the CSCL discussion.

Fischer, Rohde & Wulf elaborate on the concept of CoPs with distinctions that have developed in reaction to Lave & Wenger, distinguishing networks of practice and communities of interest from CoPs as variants. The community-based focus is a move within CSCL to the level of what Jones, Dirckinck-Holmfeld, and Lindström (2006) called the "macro-scale" in the first issue of *ijCSCL*. Here, a community is not only learning via computer-supported media, but they are also learning about how to design and use computer-supported "community-based" learning technology. In a transitional period for institutions of higher learning, when online learning threatens the viability and competitiveness of brick-and-mortar universities, it is timely to ask how residential research universities can develop unique and attractive approaches to computer-supported community-based learning by involving students in real-world research in academic labs and local industry.

Carroll & Faroque propose a middle layer of theoretical constructs they call frameworks, which mediate between general patterns and individual cases. Based on long experience working with non-profit community-based organizations struggling with computer technology, the authors want to formulate generalizations that will provide practical guidance in dealing with common problems that arise in this context. They draw on the idea of design patterns (Alexander, 1977) and the literature that has developed in computer science and CSCL based on Alexander's approach. We may dispute the definition of pattern used here as a simplification of Alexander's pattern languages and we may wonder if this sense of theory is strong enough for our field—as one reviewer did—but the authors seem to be pointing in a promising direction. Just as the nature of residential research universities in the age of distance education is in turmoil, voluntary and neighborhood-based organizations are threatened in the age of social fragmentation and globalization. In both cases, there seems to be no general solution; pattern languages of inter-related partial solutions generalized from multiple experiences and adaptable to concrete cases may provide the best solution.

Methods for analyzing collaborative interaction

The theme of methodology is one that permeates discussions of CSCL and generates endless controversy. This is not a flash theme, but an enduring one. It probably plays a role in every issue of *ijCSCL*, not only this one.

To understand the nature of collaboration or a set of collaborative activities, one has to know about the various dimensions of interaction that take place. What are the key dimensions and how can they be measured or analyzed? Researchers in CSCL have tried to apply diverse theories and methodologies, many borrowed from established fields of social science research. The results are still heavily contested. This issue of *ijCSCL* features two articles that explicitly explore importing quantitative methodologies into CSCL in combination with complementary approaches.

Meier, Spada & Rummel differentiate as many as nine dimensions of interaction for quantitative analysis and assessment. They derived these through an interesting combination of bottom-up qualitative content analysis with generalization, refined through top-down theory-informed considerations. Operationalized for reliable application, these dimensions are then used to develop and successfully apply a rating scheme for assessing the quality of computer-supported collaboration processes among dyads of college students engaged in videoconferencing. It is suggested that such a ranking approach has advantages over coding for many research questions, while still allowing a quantitative comparison of alternative conditions.

A quite similar interest drives the paper by De Laat, Lally, Lipponen & Simons. They are interested in synthesizing and extending the understanding of patterns of collaboration in the context of networked learning or CSCL. They start with a general overview of the utility of social network analysis (SNA) in social science and in previous CSCL studies. Then they bring in content analysis and critical event recall as complementary tools. Their paper provides an additional example of the usability of SNA.

While the last two articles mentioned strive to produce quantitative support for generalization, the paper by Rourke & Kanuka argues explicitly for a qualitative approach as a way of gaining deeper insight into important CSCL phenomena. Much CSCL research aims to support discourse that stimulates critical thinking and even argumentation; much CSCL literature also bemoans the common failure of online discourse to achieve high

levels of critical reflection, often using quantitative measures based upon coding, ranking or SNA, for instance. This paper adopts a "naturalistic paradigm" in which "realities are multiple, constructed and holistic ... so that it is impossible to distinguish causes from effects." It inquires into the life contexts of several students in an in-depth case study of online learning in order to explore the manifold and subtle barriers that mitigate the ideal of online critical discourse. Thereby, one catches a glimpse of personal factors that influence the diverse ways that individual students interact to co-construct reality, course materials and understandings of each other—factors that might well slip through the sieves of methods that aggregate data for the sake of generalized findings.

Perhaps the implication of the papers in this issue is that CSCL needs to promote the inter-animation of complementary quantitative and qualitative perspectives rather than hoping to converge on a single ideal method.

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