

An international research community

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The Editors are pleased to announce that the *International Journal of Computer-Supported Collaborative Learning* was again highly ranked by ISI's annual "Impact Factor" report released several days ago. *IjCSCL* ranks #11 of the 203 journals ranked by ISI in the field of Education and Educational Research and it ranks #6 of the 83 journals ranked by ISI in the field of Information Science & Library Science. *IjCSCL* is the #1 journal published by Springer and ranked by ISI in each of these categories.

IjCSCL has an impact factor of 2.243 for last year and a 5-year impact factor of 3.000. The impact factor for 2011 is the number of citations of the journal's 2009 and 2010 articles cited during 2011 in ISI-ranked journals, divided by the number of the journal's 2009 and 2010 articles. That is, articles printed in *ijCSCL* during 2009 or 2010 were cited in ISI-ranked journals on average 2¼ times during 2011. The ISI impact factor (published annually by the Institute for Scientific Information at Thomson Reuters) is widely considered the most important ranking of academic journals. In many universities, it is considered in evaluating authors for tenure and promotion.

IjCSCL supports an international research community. It receives submissions from 53 countries. About 7,000 universities and research institutions around the world subscribe to it, making its content available to millions of people through the Springer website. We also maintain the *ijCSCL.org* website with the full text of all articles freely available to the whole world; there have been two million hits to this site so far. Several thousand articles are downloaded every month from the Springer.com and *ijCSCL.org* websites. This indicates that *ijCSCL* continues to be read and cited by many researchers in the active computer-supported collaborative learning (CSCL) and learning sciences research community, in addition to being an archival venue for significant research findings.

The articles most frequently cited (in ISI Web of Science and Google Scholar) and most often downloaded (from <http://ijcscl.org/?go=contents> and <http://www.springerlink.com/content/120055>) have been:

- "Technology affordances for intersubjective meaning making: A research agenda for CSCL" (Suthers, 2006)
- "Specifying computer-supported collaboration scripts" (Kobbe et al., 2007)
- "Analyzing collaborative learning processes automatically: Exploiting the advances of computational linguistics in computer-supported collaborative learning" (Rosé et al., 2008)
- "A systemic and cognitive view on collaborative knowledge building with wikis" (Cress & Kimmerle, 2008)
- "Productive failure in CSCL groups" (Kapur & Kinzer, 2009)
- "Time is precious: Variable- and event-centred approaches to process analysis in CSCL research" (Reimann, 2009)

- “The joint organization of interaction within a multimodal CSCL medium” (Çakir, Zemel & Stahl, 2009)
- “The pedagogical challenges to collaborative technologies” (Laurillard, 2009)
- “Learning to collaborate while being scripted or by observing a model” (Rummel, Spada & Hauser, 2009)
- “Web 2.0: Inherent tensions and evident challenges for education” (Bonderup Dohn, 2009)
- “Approaching institutional contexts: Systemic versus dialogic research in CSCL” (Arnseth & Ludvigsen, 2006)

This list reflects the journal’s broad diversity of contributions to CSCL theory, technology, methodology, pedagogy, and analysis. These articles are written in a range of creative presentation styles, by authors trained in various fields and traditions. Such interdisciplinarity and multivocality are essential for the growth of knowledge in CSCL.

The CSCL and learning sciences research community continues to expand its international reach, as interest in the field spreads around the world. The International Conference of the Learning Sciences (ICLS 2012) was just held in Australia, marking the first time this conference series was located in the Asia-Pacific hemisphere. The previous year, the CSCL conference (CSCL 2011) was held in Hong Kong, with post-conference events at three Mainland China universities. As a result, *ijCSCL* is receiving more submissions from Hong Kong, Singapore, Mainland China, Japan, Korea, Thailand, Malaysia, Taiwan, Australia, and New Zealand. In fact, about a third of *ijCSCL* submissions now come from Asia-Pacific, a third from Europe and a third from the Americas. We hope that people from around the world will continue to attend the ICLS and CSCL conferences. CSCL 2013 will be in Madison, Wisconsin, USA (near Chicago); paper submissions are due November 2, 2012 (see <http://isls.org/csc12013>).

IjCSCL recently published reports on systematic educational reform programs in Singapore (Looi et al., 2011) and Hong Kong (Chan, 2011). We welcome brief descriptions of efforts to introduce CSCL approaches in other areas of the world—such as the Middle East, Africa, or Latin America.

Although competition is increasing for publication in *ijCSCL* (21% acceptance rate in 2011), we are now able to publish about 40% more articles than in the past, providing expanded opportunities for new ideas and significant contributions to the CSCL literature. Generally, authors should develop their papers through a series of preliminary presentations—such as local research talks, posters, workshop contributions, conference papers, book chapters—in order to receive peer feedback and successively expand and refine their arguments. Submissions to *ijCSCL* should report on mature research that explores processes of collaborative learning and mechanisms of its computer support in considerable depth. For instance, surveys of student self-perceptions and beliefs are considered preliminary explorations, not ready for journal publication. Submissions should be grounded in solid understanding of current CSCL research, methods, pedagogy, and theory.

The on-going success of *ijCSCL* is attributable to the authors, reviewers, and readers of the journal. Many of the authors are established leaders of the CSCL and learning sciences research community; others are newcomers or researchers in

allied fields, contributing stimulating perspectives and novel findings. The Board of Editors—about 80 researchers from around the world—and other reviewers provide the incisive feedback to authors, generally pointing the way for improvements to the papers, which greatly increase their import. Finally, the readers take up the published ideas and build our knowledge further, realizing the impact in reality, which ISI's numbers only roughly model.

In this issue

The following articles analyze the complex interplay of digital technologies with collaborative learning in a variety of intriguing situations.

In the first article, *Noel Enyedy, Joshua A. Danish, Girlie Delacruz, and Melissa Kumar* analyze in subtle detail the results initially reported in their quantitative study (Enyedy et al., 2011), which won the best-paper award at CSCL 2011. Toddlers develop body-centered understandings of the physics of the world as they bump into objects, manipulate their bodies, and interact with the objects and people around them. As they proceed through schooling up to high school or college physics courses, they gradually transform this tacit embodied cognition into explicit discourses about forces and motion, ultimately, perhaps representing these concepts, for instance in the symbolism and calculus of Newton's laws. In their analysis of a sensitive combination of computer support (augmented reality) and collaborative learning (socio-dramatic play), the authors show how young children (6-8 years old) in a CSCL classroom can already make significant progress along this cognitive trajectory, so important for comprehending our scientific world.

Most CSCL research—like that in the preceding paper—is design-based, exploring how to effectively support collaborative learning by engaging in iterative cycles of technology design, trial in concrete situations, analysis, and re-design. While this often seems like the best or even the only practical approach to increasing our understanding of how to design educational technologies and how to employ them pedagogically, design-based research seems problematic to many researchers trained in other research traditions. For instance, there is no specified methodology for analyzing the collaborative student usage of CSCL technologies. Furthermore, there are rarely direct implications of the analysis for technology re-design. Perhaps most challenging is the attempt to generalize implications from a single case-study context. Particularly, as we have increasingly come to recognize how much context matters, it becomes important to identify the nature of a case-study's context in order to judge its broader relevance. In her article, *Kim MacKinnon* draws on Cognitive Work Analysis to address this issue. She illustrates the application of this technique from engineering fields to analyzing the socio-technical context of an educational research setting.

In the popular press and in many parents' opinions, computers can exert an anti-social effect, particularly on young children's development. The knowledge-building benefits of CSCL are often assumed to apply only to older students and adults. The study by *Eun Mee Lim* shows that this can be a misconception and that technology can promote important cognitive results even among kindergarten students, if properly structured. Through quantitative and qualitative analysis, this paper demonstrates a variety of cognitive accomplishments arising from computer-supported collaborative interactions among students in the computer area of their kindergarten in Korea.

At the opposite extreme of graduate students building knowledge in a discussion environment like Knowledge Forum, other misconceptions prevail. For instance, college administrators may envision a potential to use online courses to teach large courses with few faculty members. As the contribution by *Mingzhu Qiu, Jim Hewitt, and Clare Brett* shows, effective collaborative learning in a discussion forum requires relatively small group sizes; students cannot relate deeply to discussions involving too many participants. This careful study refines our understanding of the parameters affecting the use of now rather established discussion-forum technologies. The paper concludes with useful research-based recommendations for practitioners.

The final article by *Mar Pérez-Sanagustín, Patricia Santos, Davinia Hernández-Leo, and Josep Blat* proposes and illustrates a scripting approach focused on four factors: the space, the pedagogical method, the participants, and the history. The emphasis on space is related to the domain of the blended learning course: geography; the course uses mobile and other technologies to support teams of students exploring the urban environment in Barcelona.

References

- Arnseth, H. C., & Ludvigsen, S. (2006). Approaching institutional contexts: Systemic versus dialogic research in CSCL. *International Journal of Computer-Supported Collaborative Learning*, 1(2), 167-185. Doi: 10.1007/s11412-006-8874-3.
- Bonderup Dohn, N. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International Journal of Computer-Supported Collaborative Learning*, 4(3), 343-363. Doi: 10.1007/s11412-009-9066-8.
- Çakir, M. P., Zemel, A., & Stahl, G. (2009). The joint organization of interaction within a multimodal CSCL medium. *International Journal of Computer-Supported Collaborative Learning*, 4(2), 115-149. Doi: 10.1007/s11412-009-9061-0.
- Chan, C. K. K. (2011). Bridging research and practice: Implementing and sustaining knowledge building in Hong Kong classrooms. *International Journal of Computer-Supported Collaborative Learning*, 6(2), 147-186. Doi: 10.1007/s11412-011-9121-0.
- Cress, U., & Kimmerle, J. (2008). A systemic and cognitive view on collaborative knowledge building with wikis. *International Journal of Computer-Supported Collaborative Learning*, 3(2), 105-122. Doi: 10.1007/s11412-007-9035-z.
- Enyedy, N., Danish, J., Delacruz, G., Kumar, M., & Gentile, S. (2011). *Play and augmented reality in learning physics: The Spases project*. Paper presented at the Connecting Computer-Supported Collaborative Learning to Policy and Practice: CSCL 2011 Conference Proceedings. Hong Kong. Proceedings pp. 216-223. ISLS at Lulu.
- Kapur, M., & Kinzer, C. K. (2009). Productive failure in CSCL groups. *International Journal of Computer-Supported Collaborative Learning*, 4(1), 21-46. Doi: 10.1007/s11412-008-9059-z.
- Kobbe, L., Weinberger, A., Dillenbourg, P., Harrer, A., Hamalainen, R., Hakkinen, P., et al. (2007). Specifying computer-supported collaboration scripts.

- International Journal of Computer-Supported Collaborative Learning*. 2(2-3), 211-224. Doi: 10.1007/s11412-007-9014-4.
- Laurillard, D. (2009). The pedagogical challenges to collaborative technologies. *International Journal of Computer-Supported Collaborative Learning*. 4(1), 5-20. Doi: 10.1007/s11412-008-9056-2.
- Looi, C. K., So, H. J., Toh, Y., & Chen, W. L. (2011). The Singapore experience: Synergy of national policy, classroom practice and design research. *International Journal of Computer-Supported Collaborative Learning*. 6(1), 9-37. Doi: 10.1007/s11412-010-9102-8.
- Reimann, P. (2009). Time is precious: Variable- and event-centred approaches to process analysis in CSCL research. *International Journal of Computer-Supported Collaborative Learning*. 4(3), 239-257. Doi: 10.1007/s11412-009-9070-z.
- Rosé, C., Wang, Y. C., Cui, Y., Arguello, J., Stegmann, K., Weinberger, A., et al. (2008). Analyzing collaborative learning processes automatically: Exploiting the advances of computational linguistics in computer-supported collaborative learning. *International Journal of Computer-Supported Collaborative Learning*. 3(3), 237-271. Doi: 10.1007/s11412-007-9034-0.
- Rummel, N., Spada, H., & Hauser, S. (2009). Learning to collaborate while being scripted or by observing a model. *International Journal of Computer-Supported Collaborative Learning*. 4(1), 69-92. Doi: 10.1007/s11412-008-9054-4.
- Suthers, D. D. (2006). Technology affordances for intersubjective meaning making: A research agenda for CSCL. *International Journal of Computer-Supported Collaborative Learning*. 1(3), 315-337. Doi: 10.1007/s11412-006-9660-y.