

## Building knowledge in the classroom, building knowledge in the CSCL community

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If most people who read this journal were asked by a non-academic—say at a social event or by a relative—about their work and what they are striving to accomplish, they might respond that they are trying to help kids learn better. The image that they might evoke is one of students in a school classroom, on a field trip or in an online community working together with the aid of computer-based tools. The CSCL approach recommends collaborative learning arrangements and points to the potential of a broad variety of digital media and artifacts to enhance the group knowledge building. The articles in this journal showcase new ideas about designing, fielding and evaluating such pedagogical and technological interventions in classroom learning. This issue develops a variety of perspectives on knowledge building in the classroom, as you will see as you read each article.

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In addition, *ijCSCL* addresses the concerns of the academic field. By providing a quarterly forum for innovative research, it promulgates the leading edge of grounded thinking and healthy controversy. By printing extended versions of exceptional conference papers and introducing other mature studies, it partakes of the life of the community. To promote the use of these articles in digital settings, the official electronic versions with CrossRef (an online reference-linking system) are posted upon acceptance for subscribers (including thousands of universities worldwide) at: [www.springeronline.com/journal/11412](http://www.springeronline.com/journal/11412). To provide open access, pre-publication versions of the articles are freely available at: <http://ijcscl.org/?go=contents>.

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The hardcopy version of the first issue of *ijCSCL* appeared at AERA 2006, the large gathering of the American Educational Research Association. This second issue will appear during ICLS 2006; all registered attendees there will be eligible for a free subscription to *ijCSCL* by requesting it from ISLS. Others can sign up at <http://isls.org/membership.html>. ISLS membership fees for 2007 will be fully deducted from registration for CSCL 2007, to be held in the New York City area—see <http://isls.org/cscl>. Note that papers for CSCL 2007 are due by November 1; some of them will eventually be published in *ijCSCL*.

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*ijCSCL* has already been added to the ICO-journal list in the Netherlands, thanks to Board member Paul Kirschner. This allows *ijCSCL* publications to count for tenure and promotion there. This is a first step in *ijCSCL*'s eventual inclusion in other abstracting and indexing services.

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A few future issues of *ijCSCL* will be special issues, and focus on specific themes of importance to the CSCL community. These topics have grown out of collaborative

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efforts by researchers in multinational projects or international conference workshops. Current proposals for special issues or themes include:	46
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• Collaborative learning in mobile and ubiquitous environments	48
• Dynamic automated support for CSCL	49
• Networked learning	50
• Paradigms for learning in communities	51
• Scripting in CSCL	52
• Methods for evaluating CSCL	53
• Graphical support for CSCL	54

If you would like to contribute a paper on one of these themes, please send a brief note to info@ijCSCL.org.

## **The unity and diversity of the second issue**

The second issue of ijCSCL continues to offer practical ideas for promoting collaborative learning with computer support, and related pedagogical approaches for use in the classroom. Simultaneously, it expresses a strong self-reflective tendency, proposing visions of desired futures for the field of CSCL research and arguing for innovative ways to advance the science. The mix of articles reflects a growing recognition that considerations of pedagogy, content, technology design, social context and theory must develop together, through mutual influence. The old distinctions between disparate disciplines and competing methodologies must be overcome in favor of professional collaboration and mixed methods.

The articles in this issue represent very different approaches to specialized concerns. They come, once more, from around the world: Norway, Israel, the US, Japan and France. Yet, in part by virtue of coming together in this journal, they partake of a unity—the unity of the CSCL research effort itself.

1. *Institutional Context* The first article in this issue explicitly raises the question of the role of the classroom context in contributing to the knowledge building that takes place in schools. Arnseth & Ludvigsen approach this issue from within the situation of theorizing in the CSCL community, which they construe as a tension between systemic and dialogic paradigms. They work back and forth between the concrete phenomena and the meta-theoretical, uncovering the oft-ignored immediate social context of collaboration by bringing the two major theoretical orientations of the CSCL field into dialog with each other. From a systemic vantage point, CSCL approaches and tools have met with both substantial success and discouraging lack of effect in different kinds of classrooms. Close analysis of dialogic interactions reveals the crucial role of how classroom social and pedagogical norms are put into practice by students as they make sense of their work together and thereby determine how contextual variables are realized.
2. *Building Knowledge about Design Principles* Kali proposes a digital tool for the CSCL community itself, designed to enhance knowledge building in the classroom by building knowledge in the discipline. She follows cycles of design-based research to demonstrate how a database of pedagogical principles, best practices or design patterns can be used to improve classroom learning and how the database itself can evolve in the process. The Design Principles Database is

available for the CSCL community to use and extend. Interestingly, the example of principled classroom practice presented here as a case study involves peer-evaluation, an approach discussed in depth by Lee, Chan & van Aalst last issue and reprinted in this one.	90
3. <i>Co-reflection and Narrative Analysis</i> The power of detailed analysis is illustrated in the paper by Yukawa. Using narrative analysis, she gets at the nature of collaboration between two adult students and their teacher, who communicated online via off-the-shelf technologies. The article presents the concept of co-reflection, showing both its tacit and explicit forms, as well as its cognitive and affective facets. This analysis of co-reflection locates individual reflection, made visible in shared narrative, as a part of group cognition. Conversely, it brings to the fore characteristics of the group interaction that have previously gone unnoticed, emphasizing, for instance, the roles of metaphor and interpersonal relationship.	91
4. <i>Knowledge-building Activity Structures</i> The problem of building knowledge in a traditional K-12 classroom is addressed face-on in the Japanese context by the efforts reported here. Oshima, et al. describe how the use of the Knowledge Forum technology and associated principles of knowledge building were merged with established activity structures of elementary science classrooms in Japan. Two cycles of a design study are analyzed. The first year resulted in a discouraging lack of knowledge building, but after both the task and participation designs were refined in the second year, the results were much more encouraging. The tension for students between the drive to complete tasks and the goal of building community knowledge remains as an inertial brake on educational change.	92
5. <i>A Generic Framework for Chat</i> Last issue's investigation of techniques for overcoming problems of the chat medium by Fuks, et al. suggested the need to carefully design synchronous media for collaborative learning. Now, Lonchamp provides a framework for systematically considering alternative features to include in synchronous support under different conditions. The framework is designed to model systems that are flexible and can be tailored to a wide range of users, communities, goals and contexts. Although this work is preliminary, it is published in the hopes of sparking collaboration within the CSCL community in the design, development, evaluation and theory of chat support for knowledge building using ideas and open-source technologies offered here.	93
6. <i>Errata</i> An unfortunate series of circumstances while publishing the first issue resulted in typographical errors in the article by Lee, Chan & van Aalst. To correct this, we republish both the print and electronic versions of this article in their entirety.	94
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