CSCL and its Flash Themes

Gerry Stahl

The dialectics of flash themes

Imagine a group of our prehistoric ancestors sitting around the tribal fire sharing their narratives and perspectives on the world. Cautiously, a youthful utterance emerges from beneath the adult voices to query, "Why do you always speak of the eternal fire? I see only a succession of burning logs." Haltingly, the elders try to explain that while it is true that there could be no fire without the logs, none of the individual logs could burn the way they do if they were not part of the fire, which endures much longer than any of the logs in it.

A second youth nods with her friend's question; she is also confused and stares into the glowing fire before her. She throws a new log onto the fire and observes it closely. Her log starts to smoke where it is lapped by surrounding flames. Suddenly, a flame flashes out of it. Soon, the tribal fire is brightest right around her log. She gestures to her friend, saying, "Look at that: the log would not have burned at all if not for the fire, and the fire would not be so excited without the contribution of my log and without the way that my log and the other logs enflame each other."

The two youngsters turn to their elders and ask, "How are we to understand this interplay of log and fire defining each other, which cannot easily be spoken of in our language?" The elders pause wisely and face the warmth of the flames. Eventually one holds his palms out to the source of warmth and is moved to say, "We can understand the fire by measuring the heat that it gives off and we can understand the nature of different logs by measuring how long they burn in the fire." Then another perspective comes to word: "We should look in great detail at how the log and the fire interact, how the logs catch fire and the fire endures." Another position is voiced that argues that the fire is the important thing for the tribe and that one should understand its phases—how it ebbs and flows like the moon or the tides; how it first catches from a spark in kindling, then roars across timbers and finally glows with embers. Then another claims that the fire really is nothing but the sum of individual logs burning and that a true understanding must simply know how each of the different woods of the forest burns; from such knowledge one can predict how any collection of logs will burn. Yet another voice points out that the tribal fire is a special fire. It is situated in the village center, in a pit whose shape and orientation both shelters and fans the flames. It is watched over and cared for by the villagers, who depend upon it for their survival. It is a gift of the gods, which has been entrusted to the people and passed down through the generations. As the fire dies down for the night, the two youngsters dose off, comforted by the wisdom of their tribe, which is somehow more than the simple sum of the opinions of individual elders.

Despite our fancy and precarious technology, we are not so different from our predecessors. Today, each of us warms our social and conceptual bones in front of many tribal fires—some, like the

conferences of the CSCL research community, require airplane travel and some, like our journal, require Internet access. If *ijCSCL* is a tribal fire, then the authors of its articles are the logs that must burn hotly, one after another. Here, the dialectical relationship between author and audience is mediated by the institution, practices and editors of the journal.

The CSCL research community requires scientific ideas in order to survive. In fact, the field of CSCL is nothing but a collection of these ideas. But these "ideas" do not emerge fully grown from the minds of individuals or the labs of small groups, like Athena (Minerva) from the head of Zeus. They may flash up in the minds or discourses of individuals or small groups, but they do so under specific historical and cultural conditions. They may be inspired by someone else's conceptual artifacts—a conference talk, a published paper, a stimulating question, a classic issue for the field. They then develop in various ways: as topics of informal discussions, as first drafts for a paper, as grant proposals, as experimental hypotheses.

Sometimes, someone with a hot idea decides to organize a workshop on the topic and invite other researchers interested in the theme to share their views. Individual thinking on the theme may ignite through the planning, presentation and follow-up of the workshop, setting other people's reflections on fire as well. Before you know it, a new flash theme has burst forth on the community. This was the case in four recent events that led to papers in *ijCSCL* around flash themes. In each of these cases, the plan to publish in *ijCSCL* was integral to the workshop agenda. So, the individual papers prepared for the workshops were drafted with an eye to journal publication.

After the workshop took place, the organizers began the task of encouraging workshop participants to convert their drafts into journal papers and to coordinate the set of resultant papers to fit together. At the same time, the organizers negotiated with the *ijCSCL* editors. The editors decided that each paper would be subjected to the journal's full peer-review process, including rejecting papers that did not have the potential to make a significant contribution to the field in the opinion of reviewers. In most cases, this meant that even the best papers needed to undergo major revisions in response to several detailed critical reviews. Each flash theme was supervised by a different *ijCSCL* editor (an Executive or Associate Editor). As a final step, successful papers were edited for English and formatting.

Of course, one can view an issue of *ijCSCL* as simply a collection of papers by individual researchers. But—particularly for papers on one of the flash themes—the situation is more complicated. First, most of these papers are co-authored, often by people from different institutions and even different countries. Second, many of the papers report on work within EU or Kaleidoscope projects involving many participants. Third, the papers were drafted to fit into a workshop setting, with an eye to journal publication in a coherent special issue. Fourth, the papers were coordinated after the workshop for the journal flash theme. Fifth, major revisions of the structure, argument and presentation of the findings were undertaken by the authors under the guidance of the organizer, several reviewers and at least one journal editor. Sixth, like all journal papers, the discussions of flash themes were communications to an audience, appealing to the concerns, understandings and judgments of the community, speaking their language and rooting the new contribution within the history of previous discussions. In these and other ways, the development and articulation of the ideas by the authors took place collaboratively, situated within the institutional structures of the journal-publication process and of the research community. At the same time, the journal rules and procedures themselves evolved in response to the rise of these flash themes and the opportunities for some form of special issue topics. And the definition of CSCL as a field was modified to include the thematic flashes. The friendly, but occasionally confusing negotiations among all the participants constituted the details of enactment and reproduction which mediated between the immediate actions of individual actors and the enduring social practices and structures of academic publication and research.

The specifics of the flash themes

In 2006, our inaugural year, we ignited the new tribal fire of *ijCSCL* for the CSCL research community. Many of the papers in volume 1 had their origin in the CSCL 2005 conference in Taiwan, passing the flame from conference to journal. In 2007 (volume 2), we created the category of flash themes, a new way of bundling logs together to heat up the collaborative learning of the community on these topics that seemed to be of special interest as they arose in the field.

In the March issue (2:1), we presented our first flash theme. Jack Carroll and Chris Hoadley had organized a workshop under the title of "**Learning in Communities**" at Penn State University (USA), August 14-17, 2006. Papers for this flash theme were coordinated by Carroll and edited by Stahl. We published: "*Community-based learning: The core competency of residential, research-based universities*" by Gerhard Fischer, Markus Rohde & Volker Wulf and "*Patterns as a paradigm for theory in community-based learning*" by John M.Carroll & Umer Farooq.

The September issue was a double issue (2:2&3) associated with the CSCL 2007 conference in New Brunswick. It introduced two flash themes that continue in this and future issues. The first of these was "**Scripting in CSCL**." It originated as a workshop of the European Research Team on "Computer-Supported Scripting of Interaction in Collaborative Learning Environments" (CoSSICLE) funded by the Kaleidoscope Network of Excellence. Proposed as a set of publications for *ijCSCL* by Pierre Dillenbourg and Frank Fischer, it was coordinated by Lars Kobbe. Barbara Wasson supervised the peer review. We published: "*Specifying computer-supported collaboration scripts*" by Lars Kobbe, Armin Weinberger, Pierre Dillenbourg, Andreas Harrer, Raija Hämäläinen, Päivi Häkkinen, & Frank Fischer, and "*Comparing knowledge construction in two cohorts of asynchronous discussion groups with and without scripting*" by Tammy Schellens, Hilde Van Keer, Bram De Wever & Martin Valcke.

The other flash theme in the previous issue was "**Argumentation in CSCL**." Jerry Andriessen and Michael Baker proposed this theme for *ijCSCL* based on two European projects, SCALE and DUNES. Review of these submissions was supervised by Dan Suthers. We published: "*Rainbow: A framework for analyzing computer-mediated pedagogical debates*" by Michael Baker, Jerry Andriessen, Kristine Lund, Marije van Amelsvoort & Matthieu Quignard; "*How do argumentation diagrams compare when student pairs use them as a means for debate or as a tool for representing debate?*" by Kristine Lund, Gaëlle Molinari, Arnauld Séjourné & Michael Baker; "*Argumentation in a changing world*" by Baruch B. Schwarz & Reuma De Groot; and "*Using graphical tools in a phased activity for enhancing dialogical skills: An example with Digalo*" by Nathalie Muller Mirza, Valérie Tartas, Anne-Nelly Perret-Clermont & Jean-François De Pietro.

Flash themes in this issue

In the following pages we introduce the final flash theme for this year, "**Methods for Evaluating CSCL**." This flash theme was proposed by Daisy Mwanza, based on a workshop with the same title held at the Open University in the United Kingdom on November 17-18, 2005. The submission review was supervised by Claire O'Malley. The articles below by John B. Belbas & Christine M. Greenhow and by Giasemi Vavoula & Mike Sharples belong to this flash theme.

The paper in this issue by Karsten Stegmann, Armin Weinberger & Frank Fischer belongs to the theme "**Scripting in CSCL**." Coincidentally, it is also about argumentation in CSCL. The submissions from Baruch Schwarz & Amnon Glassner and from E. Michael Nussbaum, Denise L. Winsor, Yvette M. Aqui & Anne M. Poliquin below are about argumentation as well; they carry on the theme of "**Argumentation in CSCL**," although neither of them was submitted as part of the original group or reviewed as such.

The five team voices collected in this issue adopt different perspectives on the mediation of individual and group in CSCL activities, such as debating scientific issues. They might be said to:

- Identify how the fire and its logs interact with each other,
- Envision alternative ways of building fires,
- Measure the effects of different ways of feeding the fire,
- Measure how much the logs catch fire under different conditions, or
- Measure how high the fire roars under different conditions.

See if these different approaches all make sense to you and if together they give you a more insightful understanding of the complex nature of CSCL activities than any one of the voices by itself.

These four flash themes will continue into volume 3 (2008). Please submit papers on these themes if you have something important to contribute to these fiery discourses.

Don't forget to plan for the International Conference of the Learning Sciences (ICLS 2008) in Utrecht, the Netherlands (see http://www.isls.org/icls2008/). Renew your ISLS membership now for reduced registration at ICLS and to continue subscribing to *ijCSCL*.