

## **CSCL Argumentation Systems: How Do Empirical Results and Emerging Technologies Inform System Development?**

### *Organizers*

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### **Workshop Content**

Many CSCL systems at least implicitly relate to argumentation since they allow students to learn and construct knowledge collaboratively. There has been considerable effort in developing and assessing educational technology to support argumentation within the CSCL community. Many of these efforts have been shown to be effective for specific argumentation domains. At the same time, the general design problem of how to support a learner's acquisition of argumentation skills via computer support has not been solved and is still an important item on today's CSCL research agenda. Also, the affordances of new technologies (e.g., Web 2.0, Social Software, collaborative virtual environments, mobile devices, etc.) for argumentative CSCL systems have not been thoroughly investigated yet. The central goal of this workshop is to bring together two types of researchers, (a) those with an educational/psychological background who are interested in approaches to support the acquisition of argumentation skills and empirical studies, and (b) those with a more technology-oriented perspective who are interested in groupware systems for argumentation and the novel opportunities that come with "Social Software", emerging web technologies, and other modern programming principles and technologies. These two groups will have the opportunity to meet and discuss the technological implications of recent empirical findings on argumentation and to discuss which aspects of novel technologies are worth further empirical investigation from the viewpoint of argumentation.

### **Workshop Format**

The format of this full-day workshop is characterized through a short series of statements by the participants (what is their background and what do they hope to learn from the workshop?), followed by two rounds of discussion in small sub-groups and plenum collections of the sub-group results. The workshop ends with a planning for a joint eBook on "Educational Technologies for Teaching Argumentation Skills" that has been accepted by Bentham Science. The chapters of this eBook are not fixed yet, and we expect the workshop attendees (or a subset thereof) to volunteer to write chapters based on the workshop. In that sense, the publication is both a planned outcome of the workshop and a means to extend the workshop beyond the scope of the conference.

Intended schedule – morning session:

- Welcome and brief statements of interest by participants
- Small-group (5-6 persons) discussions on "empirical implications for argumentation technology design" – what are the important design aspects of successful argumentation technology? Each small group will contain participants with a more technology-oriented research focus as well as participants with a more educational perspective.

Intended schedule – afternoon session:

- Presentation and discussion of group results (part 1)
- Participants may demonstrate their argumentation systems (running on their computers) to the larger group. This is planned as a "poster session" style session, with 5-6 systems being shown and the audience walking around
- Small-group (5-6 persons) discussions on "technological affordances worth investigation" – what are the research avenues opened by new technological trends and design options?
- Presentation and discussion of group results (part 2)
- Discussion of chapters for the planned eBook

### **Special Procedures**

Participants are asked to send informal position papers (1-2 pages) to the workshop organizers before the workshop, briefly stating their own experience with CSCL systems for argumentation and their motivation for attending the workshop.