

Workshop: Across Levels of Learning: How Resources Connect Levels of Analysis

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Abstract: CSCL research typically involves processes at the individual, small-group and community units of analysis. However, CSCL analyses generally each focus on only one of these units, even in multi-method approaches. Moreover, there is little data-based analysis of how the three levels are connected, although it is clear that such connections are crucially important to understanding learning in CSCL contexts. This workshop will explore one possible way of doing research about how the levels of individual learning, group cognition and community knowledge building are connected: through a focus on *interactional resources*, which can mediate between the levels.

This approach will be articulated by a theoretical position paper from the workshop organizers, publically available once the workshop is accepted for the conference. Then workshop participants will be invited to present brief, provocative position papers based on concrete case studies. The workshop will consist primarily of small-group and plenary discussion of these position papers.

This workshop builds on a successful workshop at ICLS 2012 and a preceding series of popular workshops at CSCL, Alpine Rendezvous and ICLS conferences since CSCL 2007. We anticipate that this workshop will lead to a new area of research in CSCL, as our previous workshops led to research and a book on multivocality.

Workshop organizers

The organizers are all experienced at running workshops. They have been Workshops Chairs, as well as Conference Chairs, at previous CSCL conferences. They organized the successful related workshop at ICLS 2011.

Gerry Stahl is a CSCL researcher and Editor-in-Chief of *ijCSCL*. He has developed a theory of group cognition and analyzed collaborative problem solving in the Virtual Math Teams Project.

Heisawn Jeong has conducted a systematic review of current research methodologies in CSCL.

Sten Ludvigsen is a socio-cultural researcher and Director of the Intermedia research lab.

R. Keith Sawyer edited the *Cambridge Handbook of the Learning Sciences*, and has written extensively on the theoretical and empirical issues involved in studying complex systems at multiple levels of analysis.

Daniel D. Suthers has analyzed intersubjective meaning making involving the mediation of representational artifacts.

Workshop audience

The workshop is intended for experienced CSCL researchers, but is open to PhD students working on related topics. A closely related workshop at ICLS 2012—which introduced the notion of working across levels of analysis in the learning-sciences community—attracted about 30 CSCL researchers. Many of them expressed interest in this follow-up workshop—because the first workshop only served to raise the central issue and more work is needed to begin to share research directions. These people will be notified personally as soon as this workshop is approved, and will be invited to submit position papers for the workshop. The CSCL community generally will be informed of the workshop through multiple sources, and also invited to submit position papers and to attend the workshop.

Workshop duration

The workshop is planned for a whole day on June 15. Participants will be invited to continue discussion informally in the evening. Position papers will be shared in advance and follow-up emails will take place after the workshop. It is likely that there will be papers, posters and demos during the main conference related to the workshop.

Workshop format

Position papers will be shared in advance with all registered workshop participants. The workshop will consist primarily of 4 thematic sessions. The session topics and the day's structure will be determined based on the submissions received.

In each session, 2 or 3 position papers will be presented briefly. Then small breakout groups will meet to discuss the position papers. Finally, the workshop will meet as a whole to share the ideas from the breakout groups.

Before the thematic sessions begin, there will be an introductory session in which the organizers introduce the workshop topic, explain the workshop process and have the participants briefly introduce themselves. After the thematic sessions end, there will be a plenary discussion summarizing the workshop findings and discussing future directions.

Workshop participation requirements

Workshop participants will be asked to submit a half-page introduction explaining their background and their interest in the workshop topic. They will be given the opportunity to submit a position paper of 1-4 pages for possible presentation at the workshop. Introductions and position papers should be emailed to the workshop organizers by April 1, 2013.

Workshop history

CSCL 2007: panel on “A common framework for CSCL methodology.”

ICLS 2008: workshop on “A common framework for CSCL interaction analysis.”

CSCL 2009: workshop on “Common objects for productive multivocality in analysis.”

ARV 2009: workshop on “Pinpointing pivotal moments in collaboration.”

ICLS 2010: workshop on “Productive multivocality in the analysis of collaborative learning.”

ARV 2011: workshop on “Leveraging researcher multivocality for insights on collaborative learning.”

CSCL 2011: workshop on “Connecting levels of learning in networked communities.”

ICLS 2012: workshop on “Analyzing collaborative learning at multiple levels.”

Workshop facilities

We will need a large plenary room, for at least 30 people, preferably seated around a large table, a circle of tables or crescent rounds. There should be electricity and Wi-Fi for laptops. We will also need 4 or 5 small breakout rooms close to the plenary room.

Workshop size

The workshop can be anywhere from 10 to 40 participants.

Workshop call for participation

Workshop: Across Levels of Learning: How Resources Connect Levels of Analysis

CSCL research typically involves processes at the individual, small-group and community units of analysis. However, CSCL analyses generally each focus on only one of these units, even in multi-method approaches. Moreover, there is little data-based analysis of how the three levels are connected, although it is clear that such connections are crucially important to understanding learning in CSCL contexts. This workshop will explore one possible way of doing research about how the levels of individual learning, group cognition and community knowledge building are connected: through a focus on *interactional resources*, which can mediate between the levels.

This approach is articulated in a theoretical position paper from the workshop organizers (available at: <http://GerryStahl.net/pub/resources.pdf>). Workshop participants are invited to present brief, provocative position papers based on concrete case studies. For instance, a case study might describe how a scientific visualization was enacted as a structuring resource of a group of science students and how informal student articulations evolved into referential resources for their more formal report. The workshop will consist primarily of small-group and plenary discussion of these position papers.

This workshop builds on a successful workshop at ICLS 2012 and a preceding series of popular workshops at CSCL, Alpine Rendezvous and ICLS conferences since CSCL 2007. We anticipate that this workshop will lead to a new area of research in CSCL, as our previous workshops led to international research and an edited book.

The workshop will be held all day on June 15, 2013. It will consist primarily of small-group and plenary discussions of themes addressed by position papers from workshop participants.

Application for participation in the workshop: Workshop participants must submit a half-page introduction explaining their background and their interest in the workshop topic. Email this introduction by April 1 to: Gerry@GerryStahl.net and HeisawnJ@gmail.com.

Submission of position papers for the workshop: Workshop participants may submit a position paper of 1-4 pages for possible presentation at the workshop. The position paper should address the workshop theme explicitly and should analyze some actual data, showing how interactional resources mediate between levels of analysis, such as individual learning, small-group interaction and whole-class discussion. Email the position paper by April 1 to: Gerry@GerryStahl.net and HeisawnJ@gmail.com.

Important dates for the workshop:

- Applications for workshop participation due: April 1
- Position papers for workshop presentation due: April 1
- Application acceptances notified: April 15
- Position paper acceptances notified: April 15
- Workshop schedule and position papers available: May 15
- Workshop takes place: June 15

Workshop organizers:

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