Discussant: “The Knowledge-Creation Perspective on CSCL Tools”

Gerry Stahl
The Model of CSCL Research

- It takes a village: an international collaboration
- It takes a prolonged effort: decades of research cycles
- It takes:
  - theory development,
  - technology design,
  - pedagogic innovation,
  - experimental interventions,
  - analytic diversity,
  - reflection across projects
K-P Labs

- The Knowledge-Practices Lab
  - Led from Helsinki & Oslo
  - Epistemic Artifacts, Activity Theory, Social Practices
  - Including many universities and companies in Europe

- An EU funded project
  - 5 years
  - Millions of Euros
  - Follow up to ITCOLE
Challenges

- **Theoretical challenge**: “Tri-logic Knowledge Creation” (Hakkarainen) as a third way in addition to Knowledge Building (Bereiter & Scardamalia) and Activity Theory (Engeström)

- **Design challenge**: To build tools that demo the theoretical difference

- **Experimental challenge**: To analyze and assess the difference the tools make
Theoretical Challenges

• What is the nature of knowledge objects?
  • What have we learned new
  • Compared to “epistemic artifacts”, “cognitive artifacts”, “refinable ideas”, “group cognition”, etc.

• How are they generated and maintained?
  • How are they created by people interacting?
  • How are their meanings shared within groups?
  • How are their meanings learned by newcomers?

• Are there really networks of artifacts, not isolated objects?

• How are projects accomplished by means of the production, selection and assembly of knowledge objects?
Design Challenges

• How can an integrated environment support:
  • Production and refinement of knowledge objects for small groups and the larger community of practice?
  • Sharing, understanding and use of knowledge objects?

• What are the design implications for:
  • Learning design?
  • Software design?
  • Project design?

• Complexity control – tradeoff of functionality
• Adoption in work – use in building knowledge
Experimental Challenges

- How can you research these challenges?

- Design-Based Research iterative cycles
  - Prototypes of software environments
  - Multiple usage scenarios

- How do you analyze success and issues?
  - Collect the whole knowledge construction process, including the production, discussion about and use of the knowledge objects
  - Use multiple analysis approaches
Conclusion

• We need to learn more from projects like this one
• We need to conduct more projects like this one.
• We need to build on projects like these – not start over each time
• We need to involve international partners, so the learning is shared world-wide
For Further Information:

- Gerry Stahl’s e-Library (collections of papers free for iPad, Kindle, PDF or low-cost print-on-demand): GerryStahl.net/elibrary

- This paper: GerryStahl.net/pub/cscl2011discussant.pdf
- These slides: GerryStahl.net/pub/cscl2011discussant.ppt.pdf

website: GerryStahl.net
email: Gerry@GerryStahl.net