## Resources for Collaborative and Discussion Based Learning

## **Carolyn Penstein Rosé**

Language Technologies Institute Human-Computer Interaction Ins School of Computer Science



### **Carnegie Mellon**

## What do we want to enable?

- Project and Problem based learning
- Collaborative reflection and Collaborative Problem Solving
- Community building and social support
  - Reducing attrition in MOOCsGateways to enduring communities of practice
  - Bridging learning and practice

# ← → C ☐ dance.cs.cmu.edu iii Apps ⊆ Taylor & Franci... M Inbox (2,336) - ... G Gallup.Com Poli... S Mysearchdial S... ▷ New Tab DANCE: Discussion Affordances for Natural Collaborative Exchange



Director: Carolyn Penstein Rosé Carnegie Mellon University cprose@cs.cmu.edu

Co-Director: Oliver Ferschke Carnegie Mellon University ferschke@cs.cmu.edu JOIN US MAILING LIST TALK SERIES RESOURCES

#### About DANCE

Drawing from two decades of research in Computer Supported Collaborative Learning, we are working to design an extension of the edX platform to enhance instructionally beneficial discussion opportunities available to students. With this working group, we want to bring together people from academia and industry to build a common vision regarding what kinds of research would be valuable to the community once such a platform extension was in place to support. Our work is initially focusing on the edX platform in particular, but in the long run we leek to provide these capabilities to Massive Open Online Courses and other online learning platform in we leek to provide these capabilities to working group is partnering with edX as a satellite collabor ive leeking to involve researchers and developers from multiple universities, foundation and induction or ganizations.

Our foundational work is beginning with species interventions designed to offer synchronous collaboration activities supported by intelligent conversational agents and enhancements to threaded discussions to support once intensive help exchange by leveraging social recommendation technology. However, our grass are much broader than this, seeking to leverage insights and methodologies from the field of Human-Computer Interaction and encompassing both synchronous and asynchronous communication very broadly. Our vision includes text, speech, and video based interactions, instrumented with all sorts of intelligent support powered by state-of-the-art analytics and leveraging language technologies and artificial intelligence more broadly in order to offer contextually appropriate support. We will coordinate this effort with regular online meetings and occasional in-person workshops.



## Resources

- Discussion Forum xBlock enabled with scaffolding and social recommendation
- Quick Helper is one example
- Collaborative chat tool (LTI enabled)
- DiscourseDB
- Discourse Analytic tools
- DANCE Scholar
- Monthly online talk series

# dLRN Connections

- Team component in Smithsonian and Stanford MOOCs
- Collaborative chat activities
  - California Community College System (engaging American History instructors in design and deployment)
  - Teacher's college and Davidson College MOOCs