How Diverse Groups Work Together: Technology and Teaming

Judith S. Olson   Professor of Informatics (Emeritus)
University of California Irvine

Where these ideas came from?

- ## The literature
- ## **30+** years of
  - ### Participating in Collaboratories
    - Collaboratories are large, *distributed* science endeavors
    - "A laboratory without walls"
  - ### Doing a meta-analysis of success in Collaboratories
  - ### Interviewing people in distributed corporate teams
  - ### Participating in the National Research Council committee on Team Science

Culminating in…

Distance Matters,
Human-Computer Interaction (2000)
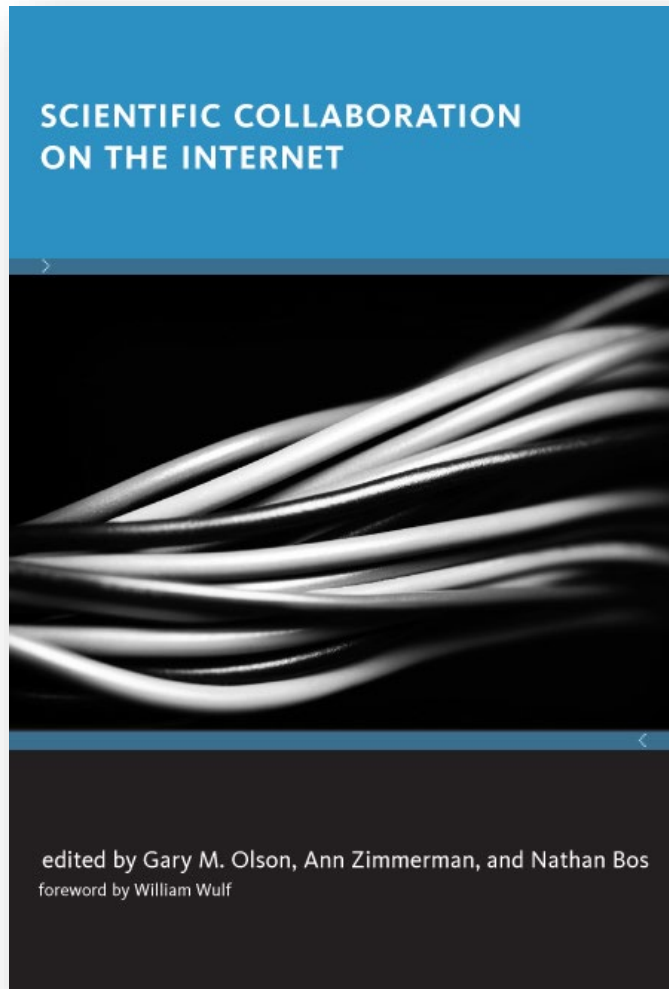Volume 15, pp 129 - 178

Distance Matters

Gary M. Olson and Judith S. Olson
University of Michigan

ABSTRACT

Giant strides in information technology at the turn of the century may have unleashed unreachable goals. With the invention of groupware, people expect to communicate easily with each other and accomplish difficult work even though they are remotely located or rarely overlap in time. Major corporations launch global teams, expecting that technology will make "virtual collocation" possible. Federal research money encourages global science through the establishment of "collaboratories." We review over 10 years of field and laboratory investigations of collocated and noncollocated synchronous group collaborations. In particular, we compare collocated work with remote work as it is possible today and comment on the promise of remote work tomorrow. We focus on the sociotechnical conditions required for effective distance work and bring together the results with four key concepts: common ground, coupling of work, collaboration readiness, and collaboration technology readiness. Groups with high common ground and loosely coupled work, with readiness both for collaboration and collaboration technology, have a chance at succeeding with remote work. Deviations from each of these create strain on the relationships among teammates and require changes in the work or processes of collaboration to succeed. Often they do not succeed because distance still matters.

Gary Olson is a psychologist interested in computer supported cooperative work; he is Professor in both the School of Information and the Department of Psychology. Judy Olson is a psychologist interested in computer supported collaborative work; she is Professor in the School of Business Administration, the School of Information, and the Department of Psychology.
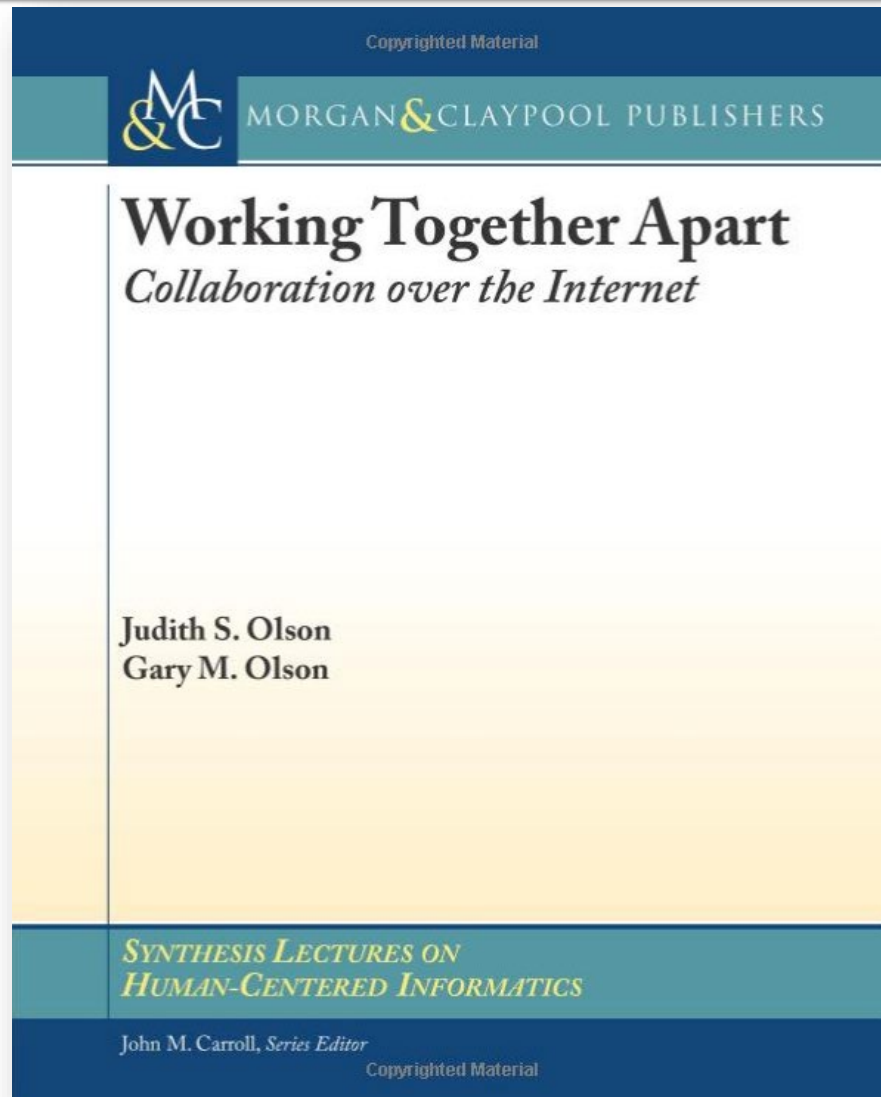
And…

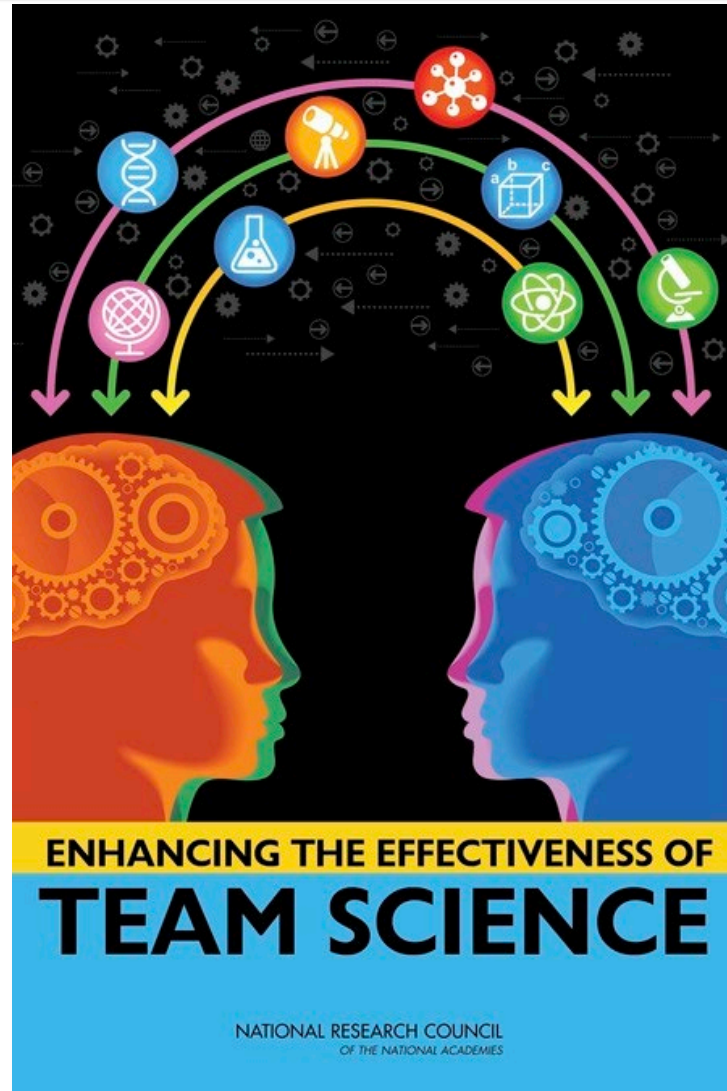SCIENTIFIC COLLABORATION ON THE INTERNET

edited by Gary M. Olson, Ann Zimmerman, and Nathan Bos
foreword by William Wulf

MIT Press, 2008

Chapter 4:
Theory of Remote
Scientific
Collaboration
(TORSC)

Many case studies

And…

And most recently

NRC Report

Important Resource

Team Science Acceleration Laboratory

tsal.uci.edu

Important takeaways

- Get familiar with the tsal.uci.edu website
  - TOOLS

- Forming, Storming, Norming, Performing

- Idea Tree

- Communication Covenant

Thank you

- Questions