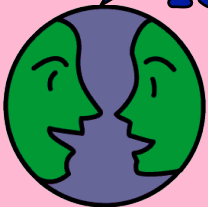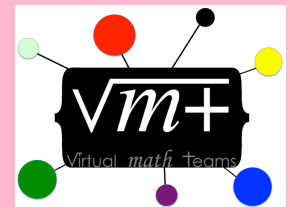# CSCL in North America

Gerry Stahl

Origins and Early Stages

- 1989 in Maratea, Italy
- largely AI in Ed
- BBN, Bank Street, educational software
- ENFI Project at Gallaudet University
- Scardamalia & Bereiter's CSILE project
- Cole's Fifth Dimension Project at UCSD
- Brown and Campione's guided discovery
- Bransford's Jasper Project
- CSCL in North America (Bloomington, Toronto, Stanford, Boulder)
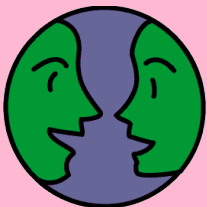- ISLS established in 2002 at Boulder
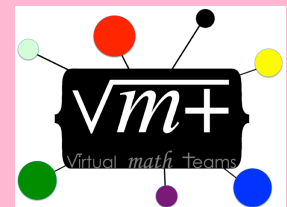
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Research Questions, Concepts and Methods

➢ **Use CSCL innovations as lever to transform education: student-centered (Papert), inquiry-based (Dewey) or constructivist (Vygotsky, edited translation)—by promoting collaborative learning**

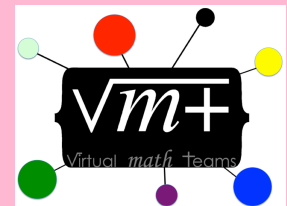➢ **Research questions: design of technology, analysis of collaborative learning, evaluation of learning outcomes**

Research Questions, Concepts and Methods

➢ Methodology: traditions of quantitative and qualitative research in educational psychology and the social sciences
  ➢ coding-and-counting
  ➢ controlled experiments with pre and post tests
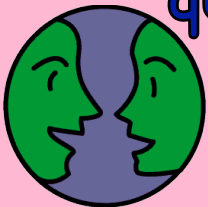 ➢ descriptive statistics of self-report surveys
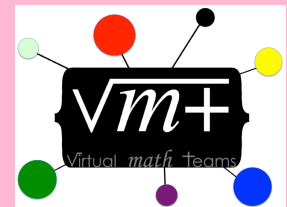 ➢ qualitative case studies

Contributions to CSCL Research

➢ **collaborative learning vs. cooperative group work (Johnson & Johnson, Slavin)**

➢ **Ethnomethodology & Conversation Analysis; Discourse Analysis**

➢ **Institute for Research in Learning in Palo Alto in the 1980s: Lave, Wenger, Suchman, Roschelle, J.S. Brown, Pea, Greeno**

➢ **Distributed cognition in San Diego**

➢ **Learning Research and Development Center in Pittsburgh**

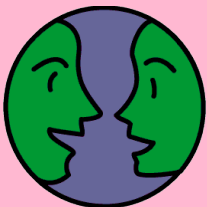➢ **Design studies, design-based research, qualitative case studies**
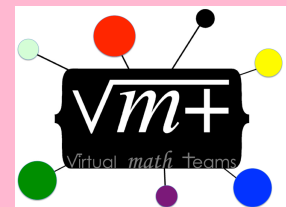
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Different Disciplines

➢ CSCL requires interdisciplinarity and internationalization

➢ Multi-methods, multi-vocality, integration of research at different units of analysis (e.g., individual, small group, community)

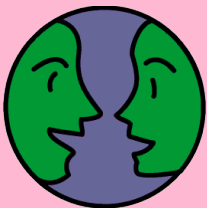➢ New methods to deal with the complexities of CSCL research agendas

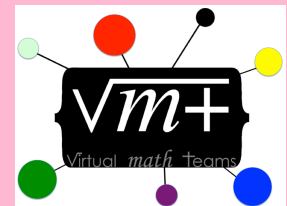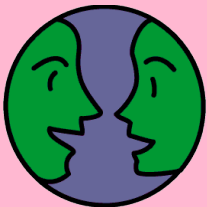www.GerryStahl.net

Future Trajectories

➢ CSCL is international; no special NA role

➢ Perhaps the most important role for North American researchers is to train & mentor future CSCL researchers from underdeveloped parts of the world

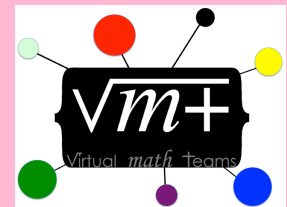➢ Educational practice and CSCL expertise development is quite uneven, even within NA

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➢ **While many elite universities in world capitals have recognized CSCL labs, whole continents (Africa, the Middle East, India and most of Asia, much of Latin America) do not**

➢ **CSCL as a profession still generally requires apprenticeship experiences; NA CSCL researchers could mentor students and colleagues from other countries**

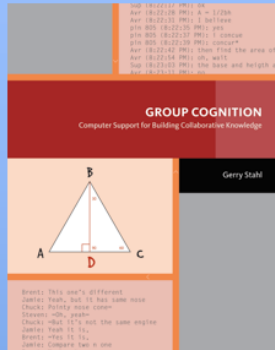➢ **CSCL technologies and approaches could be adapted for this**

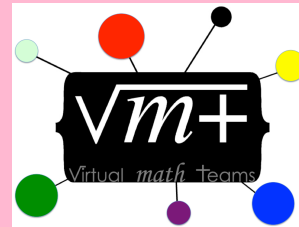# My own contribution: the VMT trilogy

Group Cognition (2006)

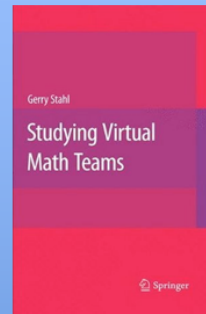**Computer Support for Building Collaborative Knowledge**

MIT Press, 510 pages
Available for Kindle

The theory of group cognition emerges from several studies of CSCL and CSCW technologies. Analysis of interaction. Theory of CSCL.

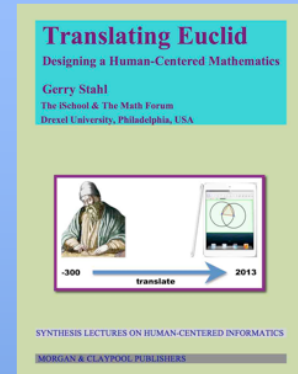www.GerryStahl.net/elibrary/gc

Studying Virtual Math Teams (2009)

Springer Press, 626 pages
CSCL Book Series, paperback

Studies of the VMT Project technology, pedagogy, analysis, theory by team members and international collaborators

www.GerryStahl.net/elibrary/svmt

Translating Euclid (2013)

Creating a Human-Centered Mathematics

Morgan Claypool Publishers, 325 pages, e-book & paperback

Latest results of this design-based CSCL research from many perspectives.

www.GerryStahl.net/elibrary/euclid