# Conference Program



http://cscl2002.org/

"Computer Support for Collaborative Learning: Foundations for a CSCL Community"

## **Program Overview**

Monday, J	anuary 7
9 – 5	Tutorials, Workshops, Doctoral Consortium
Tuesday, J	anuary 8
9 – 4	Tutorials, Workshops, Doctoral Consortium
4 - 5	Welcoming Plenary
5 – 7	Interactive Posters (A) and Reception
Wednesday	y, January 9
9 - 10:30	Keynote Conversation (A Paradigm of CSCL Research)
10:30-11	Coffee Break
11 - 1	Parallel Activities
1 - 3	Lunch Break
3 - 5	Parallel Activities
5 – 7	Interactive Posters (B) and Reception
Thursday,	January 10
9 - 10:30	Keynote Conversation (A Paradigm of Expansive Learning)
10:30-11	Coffee Break
11 - 1	Parallel Activities
1 - 3	Lunch Break
3 - 5	Parallel Activities
5 – 7	Interactive Posters (C) and Reception
Friday, Jai	nuary 11
9 - 10:30	Foundational Papers
10:30-11	Coffee Break
11 – 1	Foundational Papers & Student Prize paper
1 - 2	Lunch Break
2 - 4	Reflections, Reports, Closing

#### Monday, January 7, 2002

#### 9 – 5 Workshops, Tutorials, Doctoral Consortium

Interlocken C Workshop: Analysis and Modeling of Collaborative Learning Interactions Martin Mühlenbrock, Ulrich Hoppe Workshop: Interlocken D Integrating CSCL Environments and Digital Libraries Mary Marlino, Tammy Sumner, Mimi Recker Workshop (morning): Spruce Qualitative Methods and the Use of Videotaped Data: A Data Session Timothy Koschmann, Yrjö Engeström, Curtis LeBaron, Rogers Hall Tutorial (morning): Fir Using P2P e-Learning Technology to Turbocharge Learning Environments Richard Wilfred Yelle, Chuck Dornbush, Lynn Heffron. Tutorial: Birch Latent Semantic Analysis: Theory, Method and Application Tom Landauer, Scott Dooley Tutorial: Alder Scandinavian Perspectives on CSCL

Lone Dirckinck-Holmfeld, Annita Fjuk, Kristen Nygaard, Elsebeth Korsgaard Sorensen, Håkon Tolsby, Barbara Wasson

Doctoral Consortium Cedar

## Tuesday, January 8, 2002

#### 9 – 4 Workshops, Tutorials, Doctoral Consortium

Workshop: Interlocken C

Learning Environments for Inquiry Skills Tom Murray, Wouter van Joolingen

Workshop: Interlocken D

Documenting Collaborative Interactions: Issues and Approaches Sadhana Puntambekar, Rosemary Luckin

Workshop (morning): Spruce

The Learning Grid

John Cherniavsky, Eric Hamilton

Workshop (afternoon): Spruce

Evaluating Capabilities and Future Research Issues in the Use of Online Course Portfolios

Eugene S. Takle, Elsebeth K. Sorensen, Daryl Herzman

Tutorial (morning):

Teaching Computer Classes Using Mind Mapping Techniques Belinda Moses

Event (afternoon): Fir

Design Principles for Educational Software

Yael Kali, Nathan Bos, Marcia Linn, Jody Underwood, Jim Hewitt

Tutorial: Birch

The Inquiry Page: A Collaboratory for Curricular Innovation Bertram C. Bruce, Ann P. Bishop, Jennifer Robins

Tutorial (morning): Alder

Installing and Using Collaborative Websites Mark Guzdial, Jochen Rick

Doctoral Consortium Cedar

#### 4 – 5 Welcoming Plenary

Interlocken AB

Welcome to CSCL 2002

Gerhard Fischer, Conference Chair

Innovative Approaches to Learning at CU-Boulder

Richard Byyny, Chancellor of CU-Boulder

Cognitive Disabilities: Challenges & Opportunities for CSCL

David Braddock, Assoc. VP for Research at CU & Exec. Dir., Coleman Institute

Overview of the CSCL 2002 Program Gerry Stahl, Program Chair

#### 5 – 7 Interactive Posters (A) and Reception

Centennial Ballroom

Issues in the Design of CSCL Systems

(See short paper interactive poster session A below)

#### Wednesday, January 9, 2002

#### Keynote (A Paradigm of CSCL Research) 9 - 10:30Interlocken AB

Dewey's Contribution to the Foundations of CSCL Research

Keynote speaker: Timothy Koschmann

Moderator & discussants: Gerry Stahl, Pierre Dillenbourg, Jeremy Roschelle

#### 10:30-11Coffee Break

Centennial Ballroom

Interlocken A

Interlocken B

Interlocken CD

Demos: BSCW, C-Visions, EDC, Kolumbus, FLE3, WISE, 3D-VR

#### 11 - 1Parallel Activities

Long Papers (see long paper session D below)

(Methodology Track) Quantitative Analysis of Social Structures

Long Papers (see long paper session F below)

(Pedagogy Track) Computer Support for Problem-Based Learning

Long Papers (see long paper session J below)

(Technology Track) Synchronous Collaboration Support for Children

Spruce Event:

Using Handhelds to Support Collaborative Learning

Kathleen Luchini, Chris Quintana, Michael Curtis, Richard Murphy, Joseph Krajcik, Elliot Soloway, Daniel Suthers

Event: Fir

Technology and Collaboration in Informal Learning Environments:

A Comparison of Community Technology Initiatives

Robbin Chapman, Leo Burd

Birch Event:

C-VISions: Socialized Learning through Collaborative, Virtual,

**Interactive Simulations** 

Yam San Chee, Chit Meng Hooi

Event: Birch

Think.com

Sheila Hunter

Cedar

Integrating CSCL and the Barcelona Universal Forum of Cultures 2004

Therese Laferriere

#### 1 - 3Lunch Break

Lunch on your own ISLS Board Meeting (by invitation) Spruce

#### 3 – 5 Parallel Activities

Long Papers (see long paper session E below)

Interlocken A

(Methodology Track) Qualitative Studies and their Implications for CSCL

Long Papers (see long paper session G below)

Interlocken B

Fir

(Pedagogy Track) Computer Support to Scaffold Collaborative Learning

Long Papers (see long paper session K below)

Interlocken CD

(Technology Track) Synchronous Collaboration Support for Adults Event:

The Impact of Distributed and Ubiquitous Computational Devices on the Collaborative Learning Environment

Eric Klopfer, Earl Woodruff

Event: Birch

Multicultural Issues in the Design, Evaluation and Dissemination of CSCL Systems Masanori Sugimoto, Daniel D. Suthers

Event: Birch

L<sup>3</sup> - An Infrastructure for Collaborative Learnflow *Martin Wessner, Peter Dawabi, Jörg M. Haake* 

Panel: Spruce

Qualitative Analysis of Videotaped Data

Timothy Koschmann, Yrjö Engeström, Curtis LeBaron, Rogers Hall

#### 5 – 7 Interactive Posters (B) and Reception

Centennial Ballroom

Quantitative Analyses of Case Studies and their Implications for CSCL (See short paper interactive poster session B below)

#### Thursday, January 10, 2002

#### 9 – 10:30 Keynote (A Paradigm of Expansive Learning) Interlocken AB

New Forms of Expansive Learning at Work: The Landscape of Co-Configuration

Keynote speaker: Yrjö Engeström

Moderator & discussants: Gerhard Fischer, Roy Pea, Kai Hakkarainen

#### 10:30 – 11 Coffee Break

Centennial Ballroom

Demos: BSCW, C-Visions, EDC, Kolumbus, FLE3, WISE, 3D-VR

#### 11 – 1 Parallel Activities

Long Papers (see long paper session B below)

Interlocken A

(Theory Track) The Role of Artifacts in Collaborative Learning

Long Papers (see long paper session H below)

Interlocken B

(Pedagogy Track) Teachers and CSCL

Long Papers (see long paper session L below)

Interlocken CD

(Technology Track) Issues in the Design of Asynchronous Collaboration Systems

Event:
Orchestrating Handhelds in the Classroom with SRI's ClassSync

Chris DiGiano, Charles Patton

carts Digitalo, Chartes I atton

Fir

Spruce

Dialogue – A Web Based Communication Tool Supporting Learning Communities

\*\*Rarbaya Shally Patricia Tinto\*\*

Barbara Shelly, Patricia Tinto

Alder

Alder

3D Multi-user Virtual Worlds for Education: Knowledge Building

in the Vlearn3D.org Community

Margaret Corbit, Bonnie DeVarco

Event:

External Representations for Collaborative Learning and Assessment

Sadhana Puntambekar, Agnes Stylianou, Dan Suthers,

Chris Hundhausen, Teresa Hübscher-Younger

Event: Birch

The Knowledge Loom: Supporting School Improvement Through Online

Dissemination of Best Practices and Collaborative Inquiry to Put Them into Action

Martin Huntley, Mary Anne Mather, Stephanie Feger

#### 1-3 Lunch Break

Event:

Lunch ITCOLE Project Meeting (by invitation)

on your own

Spruce

#### 3 – 5 Parallel Activities

Long Papers (see long paper session C below)

(Theory Track) Foundational Issues of CSCL

Long Papers (see long paper session I below)

(Pedagogy Track) CSCL in the Broader Social Context

Long Papers (see long paper session M below)

(Technology Track) Issues of Representation in CSCL

Event: Alder

Modeling and Supporting Learning Activities in a Computer-integrated Classroom

Andreas Lingnau, Ulrich Hoppe

Event: Alder

Integrating Collaborative Concept Mapping Tools with Group Memory and Retrieval Functions

H. Ulrich Hoppe, Katrin Gaßner

Event: Birch

Video Cases for Teacher Learning: Issues of Social and Organizational Design for Use

Greg Shrader, Barry Fishman, Sasha Barab, Kevin O'Neill, Gary Oden, Dan Suthers

Event: Fir

Developing a Shared Language for Discussing Networked Learning Systems

Herbert Remidez, Joshua S. Gottdenker, James M. Laffey, Dale R. Musser,

Ran-Young Hong, Linda Espinosa, Christopher J. Amelung

Event: Fir

Investigating Physics: An Intimate Look at an Online Inquiry-based Graduate Science Course

Andee Rubin, Sue Doubler

Teacher Participation Program Workshop

#### 5 – 7 Interactive Posters (C) and Reception

Centennial Ballroom

Spruce

Interlocken A

Interlocken B

Interlocken CD

Qualitative Analyses of Case Studies and their Implications for CSCL (See short paper interactive poster session C below)

## Friday, January 11, 2002

#### 9 – 10:30 Foundational Papers

Interlocken AB

Epistemological Foundations for CSCL: A Comparison of Three Models of Innovative Knowledge Communities

Sami Paavola, Lasse Lipponen, Kai Hakkarainen

**Instructional Artifacts** 

Berthel Sutter

Social Information Sharing in a CSCL Community Hichang Cho, Michael Stefanone, Geri Gay

#### 10:30 – 11 Coffee Break

Centennial F

#### 11 – 1 Foundational Papers & Student Prize Paper

Interlocken AB

A Walk on the WILD Side: How Wireless Handhelds May Change CSCL Jeremy Roschelle, Roy Pea

Student Prize Paper

222

Panel on Funding for CSCL Research

John Cherniavsky, Eric Hamilton

Reflections on Interactive Events Program

Dan Suthers

#### 1 – 2 Lunch Break

Lunch CSCL Business Meeting (open)

on your own Interlocken AB

#### 2 – 4 Reflections, Reports, Closing

Interlocken AB

Reflections by Teacher Participation Program
Reflections on Short Paper Interactive Poster Sessions
Idea Catchers
Closing & Invitation to CSCL 2003

## **Long Paper Sessions**

#### A. (Theory Track): Featured Foundational Papers

Moderator/discussant: Gerry Stahl

Epistemological Foundations for CSCL: A Comparison of Three Models of Innovative Knowledge Communities

Sami Paavola, Lasse Lipponen, Kai Hakkarainen

**Instructional Artifacts** 

Berthel Sutter

Social Information Sharing in a CSCL Community

Hichang Cho, Michael Stefanone, Geri Gay

A Walk on the WILD Side: How Wireless Handhelds May Change CSCL Jeremy Roschelle, Roy Pea

#### B. (Theory Track): The Role of Artifacts in Collaborative Learning

Moderator/discussant: Jeremy Roschelle

Contributions to a Theoretical Framework for CSCL

Gerry Stahl

Exploring Foundations for Computer-Supported Collaborative Learning

Lasse Lipponen

Describing Construction of Knowledge through Identification of Collaboration Patterns in 3D Learning Environments

Ingeborg Krange, Annita Fjuk, Anniken Larsen, Sten Ludvigsen

OCAF: An Object-oriented Model of Analysis of Collaborative Problem Solving N.M. Avouris, A. Dimitracopoulou, V. Komis, C. Fidas

## C. (Theory Track): Foundational Issues of CSCL

Moderator/discussant: Michele Minnis

Making Sense of Shared Knowledge

Hans Christian Arnseth, Ivar Solheim

CSCL for Schools that Learn

James M. Laffey, Dale R. Musser, Linda Espinosa, Herbert Remidez Jr., Joshua S. Gottdenker, Ran-Young Hong, Chris Amelung

Creating Context: Design-based Research in Creating and Understanding CSCL Christopher Plekss Hoadley

## D. (Methodology Track): Quantitative Analysis of Social Structures

Moderator/discussant: Ricki Goldman

A Machine Learning Approach to Assessing Knowledge Sharing During Collaborative Learning Activities Amy Soller, Janyce Wiebe, Alan Lesgold

The Development of Deep Learning During a Synchronous Collaborative On-line Course Gillian Armitt, Frances Slack, Sharon Green, Martin Beer

Emergent Leadership in Small Groups Using Computer-Mediated Communication Ryoko Yamaguchi, Nathan Bos, Judy Olson

Golem, from Prague to Cyberspace: The Use of CSCL in Cultural Education for Diasporas *Zvi Bekerman, Gabriel Horenczyk* 

#### E. (Methodology Track): Qualitative Studies and their Implications for CSCL

Moderator/discussant: Volker Wulf

Cracking the Code: Learning to Collaborate and Collaborating to Learn in a Networked Environment *Vic Lally, Maarten de Laat* 

Taking The 'No' Out of Lotus Notes: Activity Theory, Groupware, and Student Groupwork John Halloran, Yvonne Rogers, Mike Scaife

Re-contextualization of Teaching and Learning in Videoconference-based Environments: An Empirical Study Ulf Hedestig, Victor Kaptelinin

CML – The ClassSync Modeling Language John Brecht, Mark Chung, Roy Pea

#### F. (Pedagogy Track): Computer Support for Problem-Based Learning

Moderator/discussant: Margaret Riel

Collaborative Ways of Knowing: Issues in Facilitation Cindy E. Hmelo-Silver

The STEP System for Collaborative Case-Based Teacher Education: Design, Evaluation & Future Directions Sharon J. Derry, Marcelle Siegel, John Stampen, and the STEP Team

The STEP Environment for Distributed Problem-Based Learning on the World Wide Web Constance A. Steinkuehler, Sharon J. Derry, David K. Woods, Cindy E. Hmelo-Silver

Reflective Inquiry: Enabling Group Self-regulation in Inquiry-based Science Using the Progress Portfolio Tool Eleni A. Kyza, Ravit Golan, Brian J. Reiser, Daniel C. Edelson

#### G. (Pedagogy Track): Computer Support to Scaffold Collaborative Learning

Moderator/discussant: Christopher Hoadley

Mapping Alternative Discourse Structures onto Computer Conferences David Jonassen, Herbert Remidez

Scaffolding Group Learning in a Collaborative Networked Environment Amy S. Wu, Rob Farrell, Mark K. Singley

Why Scaffolding Should Sometimes Make Tasks More Difficult for Learners Brian J. Reiser

Gender and Programming Achievement in a CSCL Environment Amy Bruckman, Carlos Jensen, Austina DeBonte

#### H. (Pedagogy Track): Teachers and CSCL

Moderator/discussant: Mark Schlager

Complexity, Harmony and Diversity of Learning in Collaborative E-learning Continuing Professional Development Groups

David McConnell

Reflective Communicator Roles in Preservice Teacher Team Email Discussions Robert J. Beck, Richard S. Brown, Sue K. Marshall, Jennifer Schwarz

Applying Technology to Restructuring and Learning

Mary Burns, Marylu Menchaca, Vicki Dimock

Constructing Collaborative Pedagogical Situations in Classrooms : A Scenario and Role Based Approach Christine Ferraris, Philippe Brunier, Christian Martel

#### I. (Pedagogy Track): CSCL in the Broader Social Context

Moderator/discussant: Earl Woodruff

Web Resource Collaboration Center (WRCC): An Integrated Tool to Support Lifelong Learning Joanna C. Dunlap

The Motivation is the Message: Comparing CSCL in Different Settings *R. T. Jim Eales, Tony Hall, Liam J. Bannon* 

From Paralyzing Myths to Expansive Action: Building Computer-Supported Knowledge Work into the Curriculum from Below

Yrjö Engeström, Ritva Engeström, Arja Suntio

Working and Learning Together: ICT Supported Learning in Small Businesses Craig Thomson

#### J. (Technology Track): Synchronous Collaboration Support for Children

Moderator/discussant: Amy Bruckman

Understanding Children's Interactions in Synchronous Shared Environments Stacey D. Scott, Regan L. Mandryk, Kori M. Inkpen

Interfaces to Support Children's Co-present Collaboration: Multiple Mice and Tangible Technologies Danaë Stanton, Helen Neale, Victor Bayon

Literacy Learning by Storytelling with a Virtual Peer Kimiko Ryokai, Catherine Vaucelle, Justine Cassell

A Two-tiered Collaborative Design for Observational Science Activities in Simulated Environments Tom Moher, Janet Kim, David Haas

#### K. (Technology Track): Synchronous Collaboration Support for Adults

Moderator/discussant: Jörg Haake

Evidence from a Series of Experiments on Video-mediated Collaboration: Does Eye Contact Matter? Richard Joiner, Eileen Scanlon, Tim O'Shea, Randall B. Smith, Canan Blake

Using Tools and Resources in Computer Supported Collaborative Writing Gijsbert Erkens, Gellof Kanselaar, Maaike Prangsma, Jos Jaspers

Getting in on the (Inter)Action: Exploring Affordances for Collaborative Learning in a Context of Informed Participation

Hal Eden

Learning Via Distributed Dialogue: Livenotes and Handheld Wireless Technology Alastair Iles, Daniel Glaser, Matthew Kam, John Canny

# L. (Technology Track): Issues in the Design of Asynchronous Collaboration Systems

Moderator/discussant: Anders Mørch

Exploring the Lack of Dialogue in Computer-Supported Collaborative Learning Mark Guzdial, Karen Carroll

Supporting Interaction Outside of Class: Anchored Discussions vs. Discussion Boards

A.J. Bernheim Brush, David Bargeron, Jonathan Grudin, Alan Borning, Anoop Gupta

Collaborative Learning at Low Cost: CoWeb Use in English Composition

Jochen Rick, Mark Guzdial, Karen Carroll, Lissa Holloway-Attaway, Brandy Walker

Virtual Communication in Middle School Students' and Teachers' Inquiry Minna Lakkala, Liisa Ilomäki, Jiri Lallimo, Kai Hakkarainen

#### M. (Technology Track): Issues of Representation in CSCL

Moderator/discussant: Bob Craig

The Effects of Representation on Students' Elaborations in Collaborative Inquiry Daniel D. Suthers, Christopher D. Hundhausen

The Effect of Representations on Communication and Product during Collaborative Modeling Simone Löhner, Wouter van Joolingen

Influence of Authority on Convergence in Collaborative Learning Teresa Hübscher-Younger, N. Hari Narayanan

Fostering Collaborative Knowledge Construction in Desktop Video-conferencing. Effects of Content Schemes and Cooperation Scripts in Peer Teaching Settings

Markus Reiserer, Bernhard Ertl, Heinz Mandl

## **Short Paper Interactive Poster Sessions**

#### A. Issues in the Design of CSCL Systems

Discussant: Tammy Sumner

Symphony-Q: A Support System for Learning Music through Collaboration Fusako Kusunoki, Masanori Sugimoto, Hiromichi Hashizume

COALE: Collaborative and Adaptive Learning Environment

Nobuko Furugori, Hirotaka Sato, Hiroaki Ogata, Youji Ochi, Yoneo Yano

Construction and Inspection of Learner Models

Juan-Diego Zapata-Rivera, Jim Greer

Using the Internet to Improve University Education: Problem-oriented Web-based Learning with MUNICS Frank Fischer, Pamela Troendle, Heinz Mandl

Applying Open Source Principles to Collaborative Learning Environments *Eric Scharff* 

Different Achievement in Online Oral History

Jason B. Ellis, Amy S. Bruckman

Design of Augmented Creative Environments

Colin Beardon, Pelle Ehn, Lone Malmborg

Case Application Suite: Promoting Collaborative Case Application in Learning By Design Classrooms JaKita N. Owensby, Janet L. Kolodner

Compadres: Lightweight Support for Distributed Collaborators

Brian R. Johnson

Project-based Learning with CommSy

Michael Janneck, Wolf-Gideon Bleek

Mathematical Discussion System

Gabe Johnson

Online Collaborative Learning as a Catalyst for Systemic Change in the Teaching-Learning Process Within a Multi-Campus Institution of Higher Education

Carlos Enrique Gonzalez, Paul Resta

Communityware Goes to School

Alessandra Agostini, Monica Divitini

Using "Thinking Tags" to Improve Understanding in Science: A Genetics Simulation Kimberley A. MacKinnon, Susan Yoon, Gail Andrews

Collaborative Network-Based Virtual Reality: The Past, the Present, and the Future of the Virtual Solar System Project

Kenneth E. Hay, Dean M. Elliott, Beaumie Kim

Moving Toward Knowledge-building Communities in Health Information Website Design Jennifer Turns, Kristina Liu, Tracey Wagner

Mediating Collective Discussions Using an Intelligent Argumentation-Based Framework Marco A. Eleuterio, Jean-Paul Barthès, Flávio Bortolozzi

VideoTraces: Rich Media Annotations for Learning and Teaching

Reed Stevens, Gina Cherry, Janice Fournier

Introduction to the Shadow netWorkspace

Joshua S. Gottdenker, Herbert Remidez Jr., Ran-Young Hong, So-Yeon Yoon, Chris Amelung, Dale R. Musser, James M. Laffey

Collaborative Discovering of Key Ideas in Knowledge Building

Teemu Leinonen, Otso Virtanen, Kai Hakkarainen, Giedre Kligyte

- Simulating Pedagogical Agents in a Virtual Learning Environment Silje Jondahl, Anders Mørch
- Support for Object-Oriented Model Construction Jakob Tholander, Klas Karlgren
- AudioExplorer: Multiple Linked Representations for Convergence Jochen Rick
- A NetSeminar Design for Team-Based Learning in Professional Development Schools Gary Obermeyer
- StoneSoup: A Contextualized Portfolio System Jenny Robins
- Transparent Latecomer Support for Web-Based Collaborative Learning Environments Torsten Illmann, Rene Thol, Michael Weber
- Integrating Palm Hand-held Technology into the Web-based Inquiry Science Environment (WISE)

  James D. Slotta, Douglas B. Clark, Britte Cheng
- Use of the CANTOR System for Collaborative Learning in Medical Visual Object Recognition Hans H. K. Andersen, Verner Andersen, Birgit G. Skov
- Using Pedagogical Agents to Support Collaborative Distance Learning
  Patricia Jaques, Adja Andrade, João Jung, Rafael Bordini, Rosa Vicari
- Networked PDAs in a Community of Learners

  Knut Lundby, Ole Smørdal, Anniken Larsen, Annita Fjuk
- NetWorked Learning Systems

Herbert Remidez, Joshua S. Gottdenker, James M. Laffey, Dale R. Musser, Ran-Young Hong, Linda Espinosa, Christopher J. Amelung

#### B. Quantitative Analyses of Case Studies and their Implications for CSCL

Discussant: Pierre Dillenbourg

- Solo, Together, Apart: Evaluating Modes of CSCL for Learning a Problem Solving Task *Tim Wright, Andy Cockburn*
- Text Forum Features for Small Group Discussions with Facet-Based Pedagogy
  Steven Tanimoto, Adam Carlson, Justin Husted, Earl Hunt, Josef Larsson, David Madigan, Jim
  Minstrell
- Elementary Students' Perceptions of Social Networks: Development, Experience, and Equity in Collaborative Software Design Activities

Yasmin B. Kafai

- Promoting the Coordination of Computer-mediated Interdisciplinary Collaboration Nikol Rummel, Hans Spada, Fabian Hermann, Franz Caspar, Katrin Schornstein
- An Experiment using Software Agents for Dialogue Analysis in Collaborative Distance Learning 560 Patricia Augustin Jaques, Flavio Moreira de Oliveira, Rosa Maria Vicari
- Using EPO to Stimulate Learning in the Health Sciences

Leo Plugge, Paul Kirschner, Gaby Lutgens, Jan Vermunt

- Synchronizing Group Interactions with Lecturing Video in Agent-based Asynchronous Virtual Classroom Hiroaki Ogata, Kenji Matsuura, Yoneo Yano
- Collaborative Assessment as a Learning Process in E-learning David McConnell
- Developing Cognitive Prerequisites to Support Inquiry Learning in a Computer Environment *Alla Keselman, Deanna Kuhn*

- Interactive Representations for Reflection in Group Simulations Mike Dobson, Julie-Ann Sime, Michael Pengelly
- Building and Maintaining the Common Ground in Web-Based Interaction Kati Mäkitalo, Päivi Häkkinen, Piritta Salo, Sanna Järvelä
- Fostering Computer Supported Collaborative Learning with Cooperation Scripts and Scaffolds Armin Weinberger, Frank Fischer, Heinz Mandl
- Multiplicity & Flexibility as Design and Implementation Features A Case Study of a Web-Based CL Community for Diverse Learners

C. Y. Janey Wang, Paul E. Resta

- Structuring Group Learning within a Web-based Science Inquiry Program Louise Yarnall, William R. Penuel
- Developing Online Communities of Practice in Preservice Teacher Education Melissa J. Poole
- Supporting Discourse in a Synchronous Learning Environment: The Learning Protocol Approach Hans-Rüdiger Pfister, Martin Mühlpfordt
- Coaching Collaboration in a Computer-Mediated Learning Environment María de los Angeles Constantino-González, Daniel D. Suthers
- Analyzing Sequential Data in Computer-Supported Collaborative Learning Dietmar Janetzko, Frank Fischer
- Evolving Shared Experience in Distributed Learning Environments Grégory Bourguin, Anders Mørch
- Modelling and Supporting Learning Activities in a Computer-integrated Classroom Andreas Lingnau, Ulrich Hoppe
- The Digital Workbook Students Constructing their Curriculum Håkon Tolsby
- Advancing Understanding of Learning in Interaction: How Ways of Participating Can Influence Joint Performance and Learning

  Brigid Barron, David Sears
- Supporting Children's Collaborative Authoring: Practicing Written Literacy While Composing Oral Texts Mike Ananny
- Using "Thinking Tags" with Kindergarten Children: A Dental Health Simulation Gail Andrews, Kimberley A. MacKinnon, Susan Yoon
- Presumptive Literacies in Technology-Integrated Science Curriculum Kimberley P. Williams, Louis M. Gomez
- Task and Interaction Regulation in Controlling a Traffic Simulation

  Patrick Jermann
- Proximity and View Awareness to Reduce Referential Ambiguity in a shared 3D Virtual Environment David Ott, Pierre Dillenbourg
- Intentional Integration Supported by Collaborative Reflection *Miyake, N., Masukawa, H., Yuasa, K., Shirouzu, H.*
- Components of an Optimal Online Environment Christine Alexander
- Webtanks for Knowledge Management: Web-based Collaborative Learning Environment Zann Gill

#### C. Qualitative Analyses of Case Studies and their Implications for CSCL

Discussant: Curt LeBaron

Supporting Chinese Distance Learners through Computer-Mediated Communication – Revisiting Salmon's Model

Peter J Smith, Swee Noi Smith

Design Experiments for Integrating a CSCL Technology into Japanese Elementary Science Education Jun Oshima, Ritsuko Oshima, Isao Murayama, Shigenori Inagaki, Hayashi Nakayama, Etsuji Yamaguchi, Makiko Takenaka

Examining Synchronous Tutoring in a Virtual World

Maria Beatrice Ligorio, Alessandra Talamo, Robert-Jan Simons

Minority Students' Participation in a Knowledge Building Community: A Sociocultural Perspective Anita Slater, Jan van Aalst

Working Hard in the 'Office': An Ethnomethodological Study of On-line Workshops Jacki O'Neill, David Martin Hasan Al-Matrouk David Wastell

Considering Technical, Social & Organizational Contexts in Systems to Support Teacher Learning Greg Shrader, Robb Lindgren, Neera Waingankar, Ryan Daily, Louis Gomez

Facilitating Knowledge Convergence in Videoconferencing Environments: The Role of External Representation Tools

Frank Fischer, Heinz Mandl

Network and Content Analysis in an Online Community Discourse Maarten de Laat

Connecting Formal and Informal Discourses to Create Yet Another Zone of Learning Hideyuki Suzuki, Hideo Funaoi

Disinhibition in a CSCL Environment

James M. Hudson, Amy Bruckman

Studying Social Aspects of Computer-Supported Collaboration with a Mixed Evaluation Approach A. Martínez, Y. Dimitriadis, B. Rubia, E. Gómez, I. Garrachón, J. A. Marcos

Rich Social Interaction in a Synchronous Online Community for Learning Deborah Tatar, James Gray, Judith Fusco

Pianos, not Orchestras

Jochen Rick

The Ethnography of Distributed Collaborative Learning

Frode Guribye, Barbara Wasson

Walk a Mile in Students' Shoes – An Approach to Faculty Development on Integrating Web-Based Collaborative Learning into Instruction

C. Y. Janey Wang

Presuppositions about "Good Communication": An Assessment of Online Discourse Susan Bagley Koyle, Mark Aakhus

Distributed CSCL/T in a Groupware Environment

Simon B. Heilesen, Mia Cudrio Thomsen, Robin Cheesman

Ethnomethods as Resources for Developing CVEs in the ITCOLE Project Alessandra Talamo, Maria Beatrice Ligorio

Continuous Evaluation of Web-based Cooperative Learning: The Conception and Development of an Evaluation Toolkit

Shirley Holst, Torsten Holmer

Interaction Repertoire in a Distance Education Community

Lars Svensson

- Multi-Dimensional Tracking in Virtual Learning Teams An Exploratory Study J. Zumbach, M. Mühlenbrock, M. Jansen, P. Reimann, H.U. Hoppe
- Computer Support for Participatory Designing A Pilot Study

  Pirita Seitamaa-Hakkarainen, Henna Lahti, Marjut Iivonen, Kai Hakkarainen
- Collaborative Problem Solving using an Open Modeling Environment C. Fidas, V. Komis, N.M. Avouris, A. Dimitracopoulou
- Talk, Silence and the Study of Situated Action *Ivar Solheim*
- Resources for Coordination in Collaborative Telelearning Rune Baggetun, Anders Mørch
- Design Reviews with Remote Critics in an Asynchronous Environment Colleen M. Kehoe
- Organizational Learning Enabling Self-organized Knowledge Logistics for a Health Insurance Company Peter Mambrey, Volkmar Pipek, Markus Rohde, Markus Won
- Teacher Candidate Perceptions of Telementoring in Knowledge Forum

  Jim Hewitt
- "Letting go of the reins:" The Evolution of Pedagogy in an Online Graduate Program *Karen Sheingold, Linda Polin*
- Assisting and Assessing the Development of Technological Fluencies: Insights from a Project-based Approach to Teaching Computer Science
  - Brigid Barron, Caitlin Martin, Eric Roberts, Alex Osipovich, Michael Ross

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