CSCL2011

computer-supported collaborative learning

July 4-8, 2011 Hong Kong, China

Connecting research to policy and practice

9th International Conference on Computer-Supported Collaborative Learning

Conference Program

International Society of the Learning Sciences

Centre for Information Technology in Education
The University of Hong Kong

Organizers

International Society of the Learning Sciences

Centre for Information Technology in Education
The University of Hong Kong

Co-organizers

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CSCL2011

9th International Conference on Computer-Supported Collaborative Learning

http://www.isls.org/cscl2011

Conference Chairs

Nancy Law The University of Hong Kong, China
Kai Ming Cheng The University of Hong Kong, China

Program Chairs

Hans Spada Freiburg University, Germany
Gerry Stahl Drexel University, USA
Naomi Miyake University of Tokyo, Japan

Welcome

It is our greatest pleasure to welcome you to the 9th International Conference on Computer Supported Collaborative Learning in Hong Kong, China. We are very happy to have you with us to celebrate the first centenary of the University of Hong Kong and we are delighted to be hosting CSCL 2011 as one of the University's centenary celebration events.

The CSCL2011 conference is co-organized by the International Society of the Learning Sciences (ISLS) and the Centre for Information Technology in Education (CITE) of The University of Hong Kong. The CSCL conference is a major international event, organized biennially by ISLS. It gathers together people involved in all aspects of the field of technology-based collaborative learning, including research, education, training and technology.

The CSCL Community, and the Conference series are interested in issues and tools related to formal and informal learning through collaboration, and in the actual educational and professional practices associated. The Conference theme for CSCL 2011 is '**Connecting computer-supported collaborative learning to policy and practice**'. It focuses on examining whether and how CSCL practices can bring deep changes to formal and informal educational practices at all levels, and contribute to education improvement at a system level by informing education policy. This conference theme also aims to bring greater recognition to the field of Learning Sciences by drawing the attention of a wider public, including policy makers and the professional educational community to its research and development contributions.

This conference theme is addressed through the keynote talks, symposia as well as a strong strand of interactive events and showcases of CSCL in practice. The four keynote speakers include Dr. Gwang-Jo KIM (Director of UNESCO Regional Bureau for Education in Asia-Pacific), Dr. Ed H. CHI (Research Scientist, Google Research), Prof. Erik DUVAL (Professor of computer science at K.U.Leuven, Belgium) and Prof. Roy PEA (Professor of the Learning Sciences at Stanford University and Director of the Stanford Center for Innovations in Learning). Their keynotes encompass the full range of issues from researcher, policy-maker and practice perspectives.

Besides the keynotes, we have an exciting lineup of conference events comprising 15 symposia, 71 long papers and 58 short papers organized in five thematic strands: knowledge building, learning activities and tools, learning interactions, technology-enhanced interactions and analysis, and issues in CSCL. The authors of these contributions come from almost 40 countries around the globe. The quality of the submissions is very high and three awards will be announced at the closing ceremony: Best Paper Award, Best Student Paper Award, and Technology Design Award. The pre-conference events have always been a highlight of the CSCL conference series, and this year is no exception. We have three tutorials, four workshops, a doctoral consortium and an early career workshop running on July 4-5.

One important feature of this year's conference is the inclusion of three parallel tracks of interactive events, demonstrations and CSCL in practice showcases, which serve as the foci for attracting practitioners to the conference. Included in these practitioner-oriented events are presentations from some prominent school-university partnership projects that are themselves good exemplars of the conference theme in action. The conference host has made successful efforts to solicit support from the Education Bureau in Hong Kong to sponsor teacher participation at this year's conference.

In order that this conference can bring greater impact to education policy development, CITE, in conjunction with the Strategic Research Theme of the Learning Sciences of our University, has jointly organized a small "global think-tank" event in the form of an invited policy symposium on July 4 and 5, that piggy backs on CSCL 2011. This symposium provides an interaction platform for a select group of prominent learning scientists and policy makers in international education agencies such as UNESCO, OECD, Worldbank, the European Commission and at ministerial levels in developing and developed countries. The key outcomes from the policy symposium are reported in a public forum on the evening of July 5, to which all conference participants are invited. We hope this event will prove to have lasting impact through the research, actions and interactions that it stimulates.

Another pioneering effort of this conference is to extend the conference activities to three major cities in Mainland China as post-conferences in Guangzhou, Shanghai and Beijing on July 11-15. ISLS launched its first efforts to bring its conferences to venues outside of North America and Europe at CSCL 2005, which was held in Taipei. CSCL 2011 is the second time for ISLS to hold its conferences in Asia. Each CSCL conference is a valuable opportunity for researchers from around the world to share their latest research findings, to renew past connections and to establish new collaborations. We hope that the post-conference events will provide more opportunities for academic exchange and collaboration between CSCL/LS researchers in Greater China and their global counterparts.

Here we would like to thank the many people who have contributed to the organization of this conference. Thanks are due to members of the International Steering Committee, and in particular the three Program co-chairs Gerry Stahl, Hans Spada and Naomi Miyake. Without their guidance, leadership and support throughout the past two years, this conference is simply not possible. We would also like to thank the 237 reviewers who have contributed to the rigorous review process.

An event of this magnitude would not be possible without the support of many partnering organizations. First of all, we would like to express our gratitude to the Education Bureau of the HKSAR government for supporting the organization of the practitioner-oriented events and for funding teacher participation in this conference. The leadership and colleagues at East China Normal University, South China University and Beijing Normal University are instrumental to the organization of the post-conference events in Shanghai, Guangzhou and Beijing respectively. We are also grateful to the sponsorship and support provided by the Learning Sciences Strategic Research Theme of the University of Hong Kong. Last but not least, we would like to thank all members of the Local Organizing Committee, and in particular every member of staff in CITE for their unfailing support and attention to detail throughout the past year.

In 1911, The University of Hong Kong was incorporated by Ordinance. A group of visionaries founded the first university in Hong Kong from which generations of leaders across the region could come forth. The University of Hong Kong was to be for China and the World. In welcoming you to CSCL 2011 on our centenary, we hope you will have a stimulating and fruitful conference, an opportunity to share with us our culture and heritage and to have a good time in Hong Kong and in the Mainland (if you can join us in the post-conference)!

Nancy Law and Kai Ming Cheng

CSCL2011 Conference co-Chairs and
Professors in the Faculty of Education, The University of Hong Kong

Organization

Organizers

The International Society of the Learning Sciences
Centre for Information Technology in Education, The University of Hong Kong

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Conference Chairs

Nancy Law, *The University of Hong Kong, China*

Kai Ming Cheng, *The University of Hong Kong, China*

Program Chairs

Hans Spada, *Freiburg University, Germany*

Gerry Stahl, *Drexel University, USA*

Naomi Miyake, *University of Tokyo, Japan*

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Nancy Law, *The University of Hong Kong*

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Christopher Hoadley, *New York University, USA*

Carol Chan, *The University of Hong Kong*

Early Career Workshop Chairs

Frank Fischer, *University of Munich, Germany*

Cindy Hmelo-Silver, *Rutgers University, USA*

Tak Wai Chan, *National Central University, Chinese Taipei*

Interactive Events, Demonstrations and CSCL in Practice Showcases Chairs

Therese Laferriere, *University of Laval, Canada*

Katerine Bielaczyc, *Nanyang Technological University, Singapore*

Sadhana Puntambekar, *University of Wisconsin-Madison, USA*

Nancy Songer, *University of Michigan, USA*

Sanna Javela, *University of Oulu, Finland*

Community Memory Chairs

Ricki Goldman, *New York University, USA*

Diane Stormont, *The University of Hong Kong, China*

Kevin Lau, *The University of Hong Kong, China*

International Relations Chairs

Peter Reimann, *University of Sydney, Australia*

Tak Wai Chan, *National Central University, Chinese Taipei*

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Ms. Candy Leung

Keynote Speakers

Dr. Gwang-Jo KIM
Director of UNESCO Regional Bureau for Education in Asia-Pacific

Linking Research and Policy Practice Towards Quality Learning: Why and How?

WEDNESDAY, JULY 6, 09:30 - 10:15 **LYH**

The reason for the question of "why" seems rather obvious: There have been ever-growing demands on education reform to prepare students for the 21st century skills yet research on learning does not seem to provide a clear guidance as to how and what to reform, not to mention massive investment on ICT in education that still requires justification. Given these arguments, I would thus raise the second question — the question of "how": How could we improve quality of learning through linking research on learning and educational policy and practice? More specifically, how can research on ICT-supported learning inform educational policies to promote access, equity, efficiency and quality of education? To this end, I will review and present the trends in both research and policy practice in the Asia-Pacific region and beyond. I will also introduce some of the initiatives that UNESCO Asia-Pacific Bureau for Education undertakes to create evidence-based supportive environments for policy makers for the effective ICT-pedagogy integration. Further areas and projects that need research-informed frameworks will be discussed to invite researchers for collaborative opportunities.

Dr. Ed H. CHI
Research Scientist, Google Research

Augmented Social Cognition: How Social Computing is Changing eLearning

WEDNESDAY, JULY 6, 10:15 - 11:00 **LYH**

Our research in Augmented Social Cognition is aimed at enhancing the ability of a group of people to remember, think, and reason. Our approach to creating this augmentation or enhancement is primarily model-driven. Our system developments are informed by models such as information scent, sensemaking, information theory, probabilistic models, and more recently, evolutionary dynamic models. These models have been used to understand a wide variety of user behaviors, from individuals interacting with social bookmark search in Delicious and MrTaggy.com to groups of people working on articles in Wikipedia. These models range in complexity from a simple set of assumptions to complex equations describing human and group behaviors.

Indeed, increasingly, new social online resources such as social bookmarking sites and Wikis are becoming central in eLearning. By studying them, we further our understanding of how knowledge is constructed in a social context. In this talk, I will illustrate how a model-driven approach could help illuminate the path forward for social computing and social learning.

Prof. Erik DUVAL
Professor of computer science, K.U.Leuven, Belgium

On the Importance of Being Open...

THURSDAY, JULY 7, 09:00 - 10:00 **LE1**

In this talk, I will discuss some of the meanings of the word 'open' in relation to learning - open source, open standards, open educational resources, open on-line courses, ... are some of the terms I may refer to. The emphasis will be on the added value of openness and transparency. Maybe we'll discuss some problems and dangers too. I will definitely show some concrete examples of our work in this area. And I would value an opportunity to talk about the lack of impact of much of our research, the importance of experimentation and the value of failure (as an opportunity to learn).

Prof. Roy PEA
Stanford University
Professor of the Learning Sciences, and
Director of the Stanford Center for Innovations in Learning

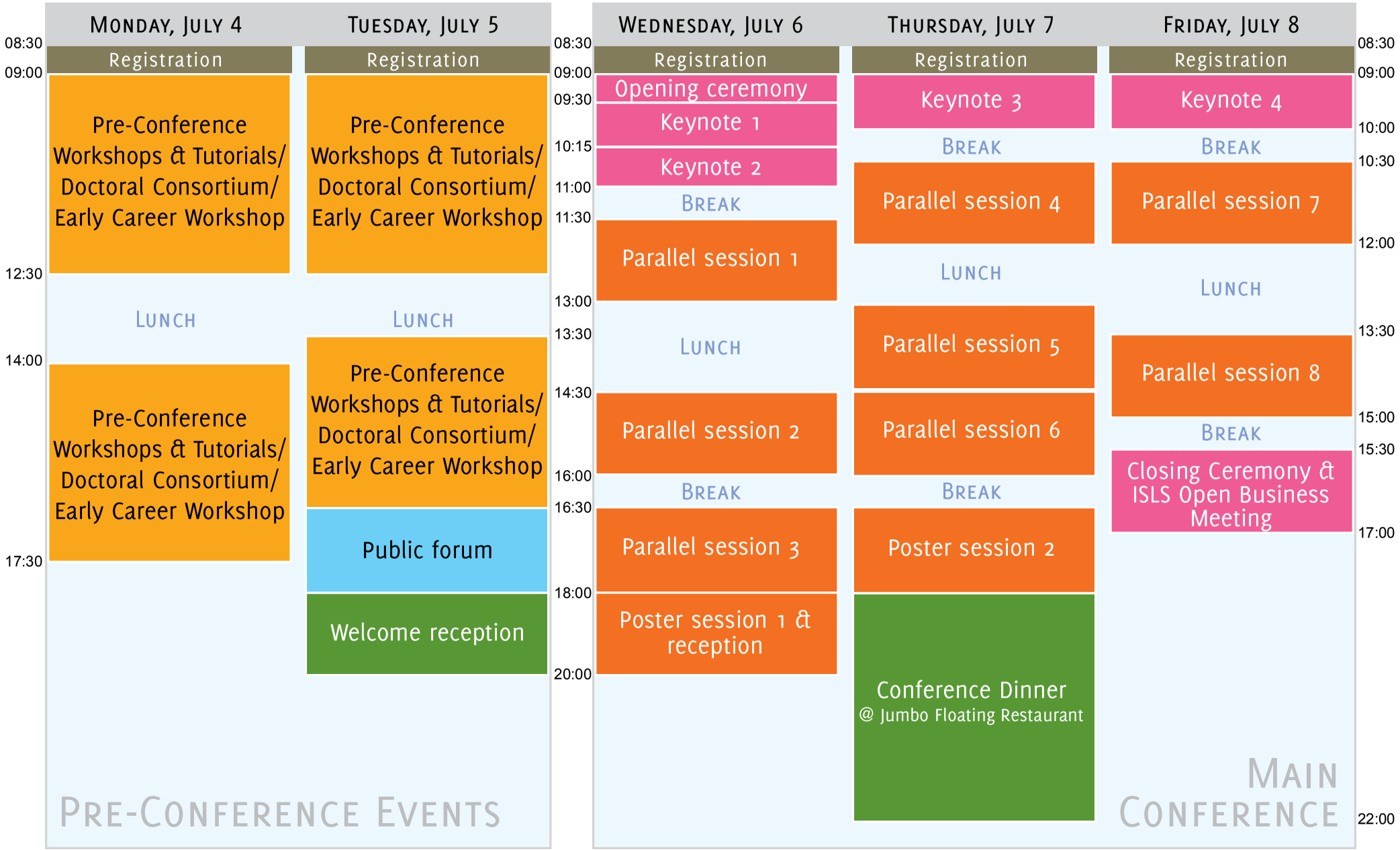
CSCL Opportunities and Challenges in the Context of the US National Educational Technology Plan

FRIDAY, JULY 8, 09:00 - 10:00 **LE1**

In November 2010, the US Secretary of Education released the National Educational Technology Plan for the United States, which presented a model of 21st century learning powered by technology, with goals and recommendations in five integrated areas: learning, assessment, teaching, infrastructure, and productivity. The NETP also identified a set of Grand Challenge Problems which should be tackled in large-scale, long-term, coordinated research within and beyond the US that could help make this vision a reality. As one member of the Technical Working Group that researched and wrote this NETP document, I welcome the opportunity to reflect on the radical nature of its fundamental ideas, the integrated nature of our recommendations for these five areas, and how the national policy environment and private-public partnerships are influencing its implementation in the United States. Global work on the Grand Challenge Problems would be desirable yet we lack coordinating bodies and mechanisms.

LE1 Hui Pun Hing Lecture Theatre, Library Extension Building
For location codes, please refer to the campus map and floor plans on the last pages of this booklet.

Conference overview



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Monday, July 4, 2011

09:00-12:30 Pre-Conference Events

Doctoral consortium — RMS203,204,205

Organizers: Chris HOADLEY, New York University; Carol CHAN, The University of Hong Kong; Kris LUND ,CNRS
Participants: Jacob DAYAN, University of Haifa; Elizabeth BAGLEY, University of Wisconsin-Madison; Annelies RAES, Ghent University; Katharina WESTERMANN, Ruhr-Universität Bochum; Anja RUDAT, Knowledge Media Research Center; Andrew KRUMM, University of Michigan; Lai Fan FU, The University of Hong Kong; Sayaka TOHYAMA, Chukyo University; Luis P. PRIETO, University of Valladolid; Iassen HALATCHLIYSKI, Knowledge Media Research Center, Germany; Franziska ARNOLD, Knowledge Media Research Center; Hsiu-Mei CHANG, National Central University; Chunlin LEI, The University of Hong Kong; Na LI, EPFL; Garrett SMITH, University of Wisconsin - Madison; Mayra Fabiana ANGELES, Universidad de Las Americas Puebla

Early career workshop — RMS402,403

Organizers: Cindy HMELO-SILVER, Rutgers University; Frank FISCHER, University of Munich; Tak-Wai CHAN, National Central University
Participants: Vanessa SVIHLA, University of California, Berkeley; Vanessa PETERS, University of Michigan; Hsin-Yi CHANG, National Kaohsiung Normal University; Jochen RICK, Saarland University; Sean GOGGINS, Drexel University; Gaowei CHEN, University of Pittsburgh; Vasa BURAPHADEJA, Assumption University; Mark CHEN, University of Washington; Nobuko FUJITA, Copenhagen Business School; Andri IOANNOU, Cyprus University of Technology; Tamara CLEGG, University of Maryland, College Park; Susanna MANN, University of Sydney; R. Benjamin SHAPIRO, Morgridge Institute for Research; Christof WECKER, Ludwig-Maximilians-Universität München; Marcela BORGE, Pennsylvania State University; Karsten STEGMANN, University of Koblenz-Landau; Cheryl Ann MADEIRA, University of Toronto

Pre-conference tutorial 1 — RMS104

Leveraging tool support for the analysis of computer-mediated activities — Part 1
Organizers: Gregory DYKE & Carolyn ROSÉ, Carnegie Mellon University, USA

Pre-conference tutorial 2 — RMS101

Introduction to Social Network Analysis theory and its application to CSCL — Part 1
Organizers: Christophe REFFAY & Alejandra MARTÍNEZ-MONÉS

Pre-conference workshop 1 — RMS206

How to integrate CSCL in classroom life: Orchestration
Organizers: Miguel NUSSBAUM, Pontificia Universidad Catolica de Chile; Pierre DILLENBOURG, Swiss Federal Institute of Technology in Lausanne; Frank FISCHER, University of Munich; Chee-Kit LOOI, Nanyang Technological University, Singapore ; Jeremy ROSCHELLE, SRI International

Pre-conference workshop 2 — RMS202

Discussing and Synthesizing Three Positions in Computer-supported Inquiry Learning from a Design — Part 1
Organizers: Daniel SPIKOL & Marcelo MILRAD, Linnaeus University, Sweden; Astrid WICHMANN, Ruhr University Bochum, Germany; Ulrich HOPPE & Jan ENGLER, University Duisburg-Essen, Germany; Ton DE JONG, University of Twente, Netherlands; Roy Pea & Heidy Maldonado, Stanford University, United States; Eileen SCANLON & Canan BLAKE, Open University, United Kingdom; Claire O'MALLEY, University of Nottingham, United Kingdom; Stamatina ANASTOPOULOU, National and Kapodistrian University of Athens, Greece

08:15-17:00 Registration open — RHTfoyer

15:00-21:30 Heritage walk & dinner

- For participants of Doctoral Consortium and Early Career Workshop only
- Gathering time and pick up point: **15:00** at the foyer of Rayson Huang Theatre (**RHTfoyer**)
- Walk along Ping Shan Heritage Trail, Yuen Long, New Territories
  This kilometre-long trail meanders through three villages and contains some of the most significant historical buildings in Yuen Long District in the New Territories. The trail provides an insight into the very foundation of Hong Kong life hundreds and hundreds of years ago when hard-working peasants worked their small farm holdings. This is also the home of the Tang clan - one of the five great clans that established themselves in the New Territories many hundreds of years ago.
- Dinner at Red Brick House in Kam Tin, New Territories

10:30-11:00 Morning tea break **RHTfoyer**

12:30-14:00 Lunch (not provided)

14:00-17:30 Pre-Conference Events

Doctoral consortium (ends at 15:00) **RMS203,204,205**

Organizers: Chris HOADLEY, New York University; Carol CHAN, The University of Hong Kong; Kris LUND ,CNRS
Participants: Jacob DAYAN, University of Haifa; Elizabeth BAGLEY, University of Wisconsin-Madison; Annelies RAES, Ghent University; Katharina WESTERMANN, Ruhr-Universität Bochum; Anja RUDAT, Knowledge Media Research Center; Andrew KRUMM, University of Michigan; Lai Fan FU, The University of Hong Kong; Sayaka TOHYAMA, Chukyo University; Luis P. PRIETO, University of Valladolid; Iassen HALATCHLIYSKI, Knowledge Media Research Center, Germany; Franziska ARNOLD, Knowledge Media Research Center; Hsiu-Mei CHANG, National Central University; Chunlin LEI, The University of Hong Kong; Na LI, EPFL; Garrett SMITH, University of Wisconsin - Madison; Mayra Fabiana ANGELES, Universidad de Las Americas Puebla

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Pre-conference tutorial 1 **RMS104**

Leveraging tool support for the analysis of computer-mediated activities — Part 2
Organizers: Gregory DYKE & Carolyn ROSÉ, Carnegie Mellon University, USA

Pre-conference tutorial 2 **RMS101**

Introduction to Social Network Analysis theory and its application to CSCL — Part 2
Organizers: Christophe REFFAY & Alejandra MARTÍNEZ-MONÉS

Pre-conference tutorial 3 **RMS206**

Designing Digital Curricula and Visualizations in The New WISE Environment to Facilitate Collaborative Science Learning
Organizers: Hsin-Yi CHANG, National Kaohsiung Normal University, Taiwan; Ji SHEN, University of Georgia, USA; Keisha VARMA, University of Minnesota; Jennifer CHIU, University of Virginia

Pre-conference workshop 2 **RMS202**

Discussing and Synthesizing Three Positions in Computer-supported Inquiry Learning from a Design — Part 2
Organizers: Daniel SPIKOL & Marcelo MILRAD, Linnaeus University, Sweden; Astrid WICHMANN, Ruhr University Bochum, Germany; Ulrich HOPPE & Jan ENGLER, University Duisburg-Essen, Germany; Ton DE JONG, University of Twente, Netherlands; Roy Pea & Heidy Maldonado, Stanford University, United States; Eileen SCANLON & Canan BLAKE, Open University, United Kingdom; Claire O'MALLEY, University of Nottingham, United Kingdom; Stamatina ANASTOPOULOU, National and Kapodistrian University of Athens, Greece

15:30-16:00 Afternoon tea break **RHTfoyer**

09:00-12:30 Pre-Conference Events

Doctoral consortium — RMS203,204,205

Organizers: Chris HOADLEY, New York University; Carol CHAN, The University of Hong Kong; Kris LUND ,CNRS
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Pre-conference workshop 3 — RMS202

Connecting Levels of Learning in Networked Communities — Part 1

Organizers: Daniel SUTHERS, University of Hawaii; Christopher TEPLOVS, University of Toronto; Maarten DE LAAT, Open Universiteit Nederland; Jun OSHIMA, Shizuoka University; Sam ZEINI, University Duisburg-Essen

Pre-conference workshop 4 — RMS206

Robotics for CSCL — Part 1

Organizers: Naomi MIYAKE, University of Tokyo; Hiroshi ISHIGURO, Osaka University; Takayuki KANDA, ATR Japan; Hajime SHIROUZU, Chukyo University

10:30-11:00 Morning tea break — RHTfoyer

12:30-13:30 Lunch (not provided)

08:15-17:00 Registration open — RHTfoyer

09:30-13:30 Post-conference travel agent counter open — RHTfoyer

- Participants who wish to travel to Mainland China after the conference and who need help to apply for China visa can seek help from the travel agent.
- Participants can also ask enquiries about the Hong Kong local tours and the tours in China at the counter.

13:30-16:30 Pre-Conference Events

Doctoral consortium — RMS203,204,205

Organizers: Chris HOADLEY, New York University; Carol CHAN, The University of Hong Kong; Kris LUND ,CNRS
Participants: Jacob DAYAN, University of Haifa; Elizabeth BAGLEY, University of Wisconsin-Madison; Annelies RAES, Ghent University; Katharina WESTERMANN, Ruhr-Universität Bochum; Anja RUDAT, Knowledge Media Research Center; Andrew KRUMM, University of Michigan; Lai Fan FU, The University of Hong Kong; Sayaka TOHYAMA, Chukyo University; Luis P. PRIETO, University of Valladolid; Iassen HALATCHLIYSKI, Knowledge Media Research Center, Germany; Franziska ARNOLD, Knowledge Media Research Center; Hsiu-Mei CHANG, National Central University; Chunlin LEI, The University of Hong Kong; Na LI, EPFL; Garrett SMITH, University of Wisconsin - Madison; Mayra Fabiana ANGELES, Universidad de Las Americas Puebla

Early career workshop — RMS402,403

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Pre-conference workshop 3 — RMS202

Connecting Levels of Learning in Networked Communities — Part 2

Organizers: Daniel SUTHERS, University of Hawaii; Christopher TEPLOVS, University of Toronto; Maarten DE LAAT, Open Universiteit Nederland; Jun OSHIMA, Shizuoka University; Sam ZEINI, University Duisburg-Essen

Pre-conference workshop 4 — RMS206

Robotics for CSCL — Part 2

Organizers: Naomi MIYAKE, University of Tokyo; Hiroshi ISHIGURO, Osaka University; Takayuki KANDA, ATR Japan; Hajime SHIROUZU, Chukyo University

15:00-15:30 Afternoon tea break — RHTfoyer

16:30-18:00 Back to Learning: A Public Forum — RHT

18:00-20:00 Welcome reception — RRSpodium

09:00-09:30 Opening ceremony — LYH

09:30-10:15 Keynote 1 — LYH

Linking Research and Policy Practice Towards Quality Learning: Why and How?
Dr. Gwang-Jo KIM, *Director of UNESCO Regional Bureau for Education in Asia-Pacific*

Chair: K. M. Cheng, The University of Hong Kong
Respondent: Naomi Miyake, University of Tokyo

10:15-11:00 Keynote 2 — LYH

Augmented Social Cognition: How Social Computing is Changing eLearning
Dr. Ed H. CHI, *Research Scientist, Google Research*

Chair: Nancy Law, The University of Hong Kong
Respondent: Pierre Dillenbourg, EPFL

11:00-11:30 Morning break — LE1foyer

11:30-13:00 Parallel session 1

Long paper session 1: Knowledge Building — LE2

Chair: Jingyan Lu, The University of Hong Kong

Construction of health knowledge in an alternative medical community of practice: Hermeneutic analysis of a web forum
Joachim Kimmerle, Kristina Abels, Katharina Becher, Anna Beckers, Annette Haussmann, Ansgar Thiel, Ulrike Cress

Learning Science through Knowledge-Building and Augmented Reality in Museums
Susan Yoon, Karen Elinich, Christopher Steinmeier, Joyce Wang, Sean Tucker

Beyond Small Groups: New Opportunities for Research in Computer-Supported Collective Learning
Yasmin Kafai, Kylie Peppler

Visualisations for longitudinal participation, contribution and progress of a collaborative task at the tabletop
Roberto Martinez, Judy Kay, Kalina Yacef

08:15-11:00 Registration open — LYH

11:30-17:00 Registration open (Continued) — LE1foyer

09:00 Cultural performance — traditional lion dance at the opening ceremony — LYH

09:30-13:30 Post-conference travel agent counter open — LE1foyer

- Participants who wish to travel to Mainland China after the conference and who need help to apply for China visa can seek help from the travel agent.
- Participants can also ask enquiries about the Hong Kong local tours and the tours in China at the counter.

Long paper session 2: Learning activities and tools — LE3

Chair: Sean Goggins, Drexel University

Collaborative writing: too much of a good thing? Exploring engineering students' perceptions using the Repertory Grid
Anindito Aditomo, Rafael Calvo, Peter Reimann

The Interactional Organisation of Location-based Gaming
Jo Dugstad Wake, Frode Guribye, Barbara Wasson

Analysis of Small Group Interactions in a Seamless Language Learning Environment: An Artifact-Oriented Approach
Lung-Hsiang Wong, Wenli Chen, Ying Zhan, Chee-Kuen Chin

Digital Media in the Classroom: A Study on How to Improve Guidance for Successful Collaboration and Learning in Student Teams
Carmen Zahn, Karsten Krauskopf, Friedrich W. Hesse, Roy Pea

Long paper session 3: Learning interactions — LE6

Chair: Nancy Butler Songer, University of Michigan

Group Sense Making of Multiple Sources in a Hypertext Environment
Sarah Sullivan, Katherine Knight, Sadhana Puntambekar

Formulating WISE Learning Experiences
Vanessa Svihla

Technology for Supporting Learners in Out-of-School Learning Environments
Tamara Clegg, Christina Gardner, Janet Kolodner

Students Producing Thick Descriptions
Richard Alterman, Johann Larusson

Long paper session 4: Technology-enhanced interactions & analysis — LE7

Chair: Paul Kirschner, Open University of the Netherlands

ACODEA: A Framework for the Development of Classification Schemes for Automatic Classifications of Online Discussions
Jin Mu, Karsten Stegmann, Elijah Mayfield, Carolyn Rose, Frank Fischer

Supporting Collaborative Learning in Recitation Sections Using an Ambient Awareness Tool
Hamed Alavi, Pierre Dillenbourg

Group Awareness Tools for Controversial CSCL Discussions: Dissociating Rating Effects and Visualized Feedback Effects
Jürgen Buder, Daniel Bodemer

Missing Something? Authority in Collaborative Learning
Iris Howley, Elijah Mayfield, Carolyn P. Rose

Long paper session 5: Issues in CSCL — LE8

Chair: Jan van Aalst, The University of Hong Kong

Learning Through Collaborative Creation of Knowledge Objects in Teacher Education
Crina Damsa, Sten Ludvigsen

Assessing the use of a Trace-Based Synchronous Tool for distant language tutoring
Mireille Betrancourt, Nicolas Guichon, Yannick Prié

A collaborative platform supporting knowledge sharing and problem solving for teacher professional development
Thierry Condamines

Interactive Representations of Student Activity to Inform Teacher Collaborations: Results from a Formative Exploration
R. Benjamin Shapiro, Peter Wardrip

Interactive events session 1: Knowledge building — LE1

Common boundary between different worlds: Collaboration between researchers and school teachers in NLC KB project in Singapore
Jennifer Yeo, Yew-Jin Lee, Jing Wu, S Zanariah Ahmad, Siew Kheng Cheong, Chor Miang Sim, Hsueh Chien Dawn Lee, Chong Wah Cedric Choy

Getting started and sustaining Knowledge Building
Chuy Maria, Marlene Scardamalia, Carl Bereiter, Monica Resendes, Bodong Chen, Christian Tarchi, Richard Messina, Elizabeth Morley, Katerine Bielaczyc, Stian Håklev, Jianwei Zhang

Interactive events session 2: Technology & pedagogy co-design — LE4

Collaborative Virtual Worlds and Productive Failure: Design Research with Multi-disciplinary Pedagogical, Technical and Graphics, and Learning Research Teams
Michael Jacobson, Charlotte Taylor, Chun Hu, Anne Newstead, Wai-Yat Wong, Debbie Richards, Meredith Taylor, Iwan Kartiko, John Porte, Manu Kapur

Interactive events session 3: CSCL in school subjects — LE5

An Interactive Research Experience with Mobile Biology Games — Part 1
Eric Klopfer, Judy Perry, Louisa Rosenheck

13:00-14:30 Lunch — FSC2

13:00-14:30 ISLS Board Meeting (Closed) — FSC1A05

14:30-16:00 Parallel session 2

Short paper session 1: Knowledge Building — LE2
Chair: Friedrich Hesse, KMRC

Divergent and Convergent Knowledge Processes on Wikipedia
Iassen Halatchliyski, Joachim Kimmerle, Ulrike Cress

Evaluation by Grade 5 and 6 Students of the Promisingness of Ideas in Knowledge-Building Discourse
Bodong Chen, Maria Chuy, Monica Resendes, Marlene Scardamalia, Carl Bereiter

Characterizing Knowledge Building Discourse
Jennifer Yeo, Jing Wu

Some Discourse Mechanisms for Knowledge Advancement in a CSCL Context
Ming Lai, Nancy Law

Dimensions of Social Interactions Contributing to Knowledge Construction and Building in an Online Learning Community
Victor Law, Xun Ge, Deniz Eseryel

Short paper session 2: Learning activities and tools — LE3
Chair: Frode Gruibye, University of Bergen

Case-based learning in a virtual professional training — Collaborative problem solving activities and outcomes
Birgitta Kopp, Melanie Hasenbein, Heinz Mandl

Online Smart "Discussion Forum" — An environment for an Effective Task-based Collaborative Discussion among the Adult Learners
Nantha Kumar Subramaniam, Abdullah Mohd Zin, Sufian Idris

Collaborating in a Virtual Engineering Internship
Cynthia D'Angelo, Golnaz Arastoopour, Naomi Chesler, David Williamson Shaffer

Designing, orchestrating and evaluating inter-professional collaboration in a scripted 3D learning space for vocational education
Raija Hamalainen, Kimmo Oksanen

Learning with Prediction Markets: An Experimental Study
Cali Ellis, Rahul Sami

Co-design of Collaborative Collective Knowledge Environment
Elizabeth S. Charles, Mike Tissenbaum, Chris Whittaker, Michelle Lui, Michael Dugdale, James D. Slotta

Short paper session 3: Learning interactions **LE6**

Chair: Hans Spada, University of Freiburg

Emerging Tensions in the Future of Technology-Enhanced Learning: First Results of an International Delphi Study
Celia Kaendler, Christine Plesch, Anne Deiglmayr, Dejana Mullins, Nikol Rummel, Hans Spada

An Integrated Approach for the Enactment of Collaborative Pedagogical Scripts Using Mobile Technologies
Marcelo Milrad, Dan Kohen-Vacs, Bahtijar Vogel, Miky Ronen, Arianit Kurti

The design and investigation of a web-based synchronous and asynchronous peer feedback mechanism
Eleni A. Kyza, Georgia Michael, Costas P. Constantinou

An Execution Semantics to Support Flexibility in Collaborative Learning Scripts
Roberto Perez-Rodriguez, Manuel Caeiro-Rodriguez

PeerSpace: An Online Peer Collaborative Learning Environment for First Year Computer Science Students
Cen Li, Zhijiang Dong, Roland Untch, Nathan Reale, Michael Chasteen

The Role of Different Narratives in Recognizing Peer Expertise in Collaborative Programming Projects
Deborah Fields, Yasmin Kafai

Short paper session 4: Technology-enhanced interactions & analysis **LE7**

Chair: Carolyn Rose, Carnegie Mellon University

The impact of interaction analysis graphs on groups during online collaboration through blogs according to the "learning by design" scenario
Georgios Fesakis, Angelique Dimitracopoulou, Aggelos Palaiodimos

Video Analysis of Learners' Interactions with the Expert: Using Mobile Devices as Mediating Tools for Learning at a Museum
Susanna Mann, Peter Reimann

Multiple modes of scaffolding to enhance web-based inquiry
Annelies Raes, Tammy Schellens, Bram De Wever, Ellen Vanderhoven

Social Annotating in the Online Margins: Re(designing) an Annotation Tool drawing on Unintended Ways University Students and Faculty Chose to Use It
Eva Bures, Andrew Feenberg, Cindy Xin, Philip Abrami

Investigating Students' Epistemologies in CSCL discourse through Reflective Judgment Model and Practical Epistemologies
Johnny Yuen

Supporting Collaborative Interaction with Open Learner Models: Existing Approaches and Open Questions
Susan Bull, Ravi Vatrapu

Short paper session 5: Issues in CSCL **LE8**

Chair: Pierre Dillenbourg, EPFL

Recommender Systems: A Technology to Foster Individual and Collaborative Learning
Jürgen Buder, Christina Schwind

Support by Educators for Knowledge Building in an Organic Social Networking Environment
David James Woo

Group Meaning in Mathematical Discourse: A Multimodal Analysis of PreK Students Using Multi-Touch Virtual Manipulatives
Michael A. Evans, Jesse L.M. (Jay) Wilkins, Andrea Motto, Adrienne Brunger, Jeremy Crider

Privacy, Trust and the Practice of Learning Management Systems
Kai-Uwe Loser, Thomas Herrmann

Virtual Social Competence Instruction for Individuals with Autism Spectrum Disorders: Beyond the Single-User Experience
Matthew Schmidt, James Laffey, Janine Stichter

Teachers' interventions and Knowledge Creation in a Master 'Learning & Innovation for Teachers in Vocational Education'
Frank de Jong, Hennie van Heijst, Lia Spreeuwenberg, Hanneke de Laat

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INTERACTIVE EVENTS SESSION 4: KNOWLEDGE BUILDING **LE1**

Collaborative Design (CODE) as a Teacher Professional Development Model in Francophone and Anglophone Quebec
Therese Laferriere, Alain Breuleux

Knowledge Building Teacher Network (KBTN) in Hong Kong: Sustaining and Scaling up Knowledge Building through Principle-Based Innovation
Carol Chan, Nancy Law, Diane Hui, Yuen Han Fung, the KBTN Team

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INTERACTIVE EVENTS SESSION 5: TECHNOLOGY & PEDAGOGY CO-DESIGN **LE4**

Orchestrating Collaborative Science Curriculum Across Formal and Informal Contexts
Mike Tissenbaum, Michelle Lui, James D. Slotta

INTERACTIVE EVENTS SESSION 6: CSCL IN SCHOOL SUBJECTS **LE5**

Using Google Sites in collaborative inquiry project-based learning
Samuel Kai Wah Chu

16:00-16:30 AFTERNOON BREAK **LE1foyer**

16:30-18:00 PARALLEL SESSION 3

SYMPOSIUM 1: KNOWLEDGE BUILDING **LE2**

Towards Productive Multivocality in the Analysis of Collaborative Learning
Daniel Suthers, Kristine Lund, Carolyn Rose, Gregory Dyke, Nancy Law, Chris Teplovs, Wenli Chen, Ming Ming Chiu, Heisawn Jeong, Chee Kit Looi, Richard Medina, Jun Oshima, Keith Sawyer, Hajime Shirouzu, Jan Willem Strijbos, Stefan Trausan-Matu, Jan van Aalst

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SYMPOSIUM 2: LEARNING ACTIVITIES AND TOOLS **LE3**

Augmented Reality Games: Place-based Digital Learning
Eric Klopfer, Josh Sheldon, Louisa Rosenheck, Judy Perry, Kurt Squire, Jim Mathews, Bob Coulter, Matt Dunleavy, R. Benjamin Shapiro

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SYMPOSIUM 3: LEARNING INTERACTIONS **LE6**

Collaboration as Scaffolding: Learning Together with Dynamic, Interactive Scientific Visualizations and Computer Models
Marcia Linn, Ji Shen, Hsin-Yi Chang, Fang-Pei Hsieh, Beat Schwendimann, Camillia Matuk, Jennifer King Chen, Jennifer Chiu, Charles Xie, Baohui Zhang, Daner Sun, Karel Mous, Quee Boon Koh, Bahadia Namdar, Rutchelle Enriquez, Jing Lei, Heng Luo, Sunghye Lee, Hsin-Kai Wu

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SYMPOSIUM 4: TECHNOLOGY-ENHANCED INTERACTIONS & ANALYSIS **LE7**

Contextualizing the changing face of Scaffolding Research: Are we driving pedagogical theory development or avoiding it?
Rosemary Luckin, Chee Kit Looi, Sadhana Puntambekar, Danae Stanton Fraser, Iris Tabak, Joshua Underwood, Wenli Chen

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SYMPOSIUM 5: ISSUES IN CSCL **LE8**

Introducing China: Expanding the CSCL Research Community
Jianhua Zhao, Kedong Li, Shaoming Chai, Lu Wang Shaoqing Guo, Shengquan Yu, Gang Cheng, Xianmin Yang, Yanyan Li, Jianhua Zhao, Hui Xu, Xidiao Chen, Xiaoqing Gu, Jian Zhao, Xianqing Bao, Kangli Li, Slotta James, Nancy Law

Interactive events session 7: Knowledge building — LE1

Trialogical learning supported by Knowledge Practices Environment
Sami Paavola, Merja Bauters, Christoph Richter, Crina Damsa, Klas Karlgren, Eini Saarivesi, Seppo Toikka, Minna Lakkala, Hanni Muukkonen, Liisa Ilomaki

Interactive events session 8: Technology & pedagogy co-design — LE4

Creativity of Teachers and Peer-Student-Tutors through Video Media at the Intersection of Content and Cognition
Eric Hamilton, Nancy Harding, Gina Chaves, Wendy Chaves

Interactive events session 9: CSCL in school subjects — LE5

ICT for educational pedagogical innovations and learner diversity
Yiu Yee Ku, Andrew Chung Yee Tse, Keung Kai Chan, Kenneth Cheng, Alison Lau, Tung Keung Poon

18:00-20:00 Poster session 1 & reception (Reception to start at 18:45) — LYH

1.1 **Online Communication and Collaboration in a Community of Practice for Teachers Professional Development**
Gyeong Mi Heo, Alain Breuleux

1.2 **Students changing their conceptions of collaboration through computer-supported knowledge building**
Yu-Hui Chang, Huang-Yao Hong, Pei-Chen Tsai, Po-Hsien Wang

1.3 **Hidden Structures in Asynchronous Course Forums: Toward a Golden Ratio Population Parameter**
Paul Gorsky

1.4 **Patterns as Facilitators for Knowledge Building in Learning Organizations**
Christina Matschke, Johannes Moskaliuk, Franziska Arnold, Ulrike Cress

1.5 **Exploring the Role of Technology-Supported Peer Instruction in Student Understanding and Interaction in College Physics Classrooms**
Elizabeth Charles, Jonghwi Park, Chris Whittaker, Nathaniel Lasry

1.6 **Collaboration at Scale: How and Why are Instructors Using Collaborative Learning Management System Tools?**
Andrew Krumm, Richard Waddington, Steven Lonn, Stephanie Teasley

1.7 **Fostering Critical Thinking in Science Museums through Digital Augmentations**
Susan Yoon, Karen Elinich, Joyce Wang, Christopher Steinmeier, Jackie Van Schooneveld

1.8 **Investigating Different Critical Thinking Tests in an Authentic Inquiry**
Jing Leng

1.9 **The development of life transition skills in Inter-Life: a novel, 3-dimensional virtual learning environment**
Alison Devlin, Vic Lally, Madeleine Sclater, Karla Parussel

1.10 **How Do Instructors Design Classroom-wide Interactive Formative Assessments? A Field Study with 18 Schools**
Neema Moraveji, Roy Pea

1.11 **Patterns of Collaborative Convergence in a Scenario-Based Multi-User Virtual Environment**
Shannon Kennedy-Clark, Kate Thompson

1.12 **Diagnosable Concept Map toward Group Formation and Peer Help**
Tsukasa Hirashima, Kazuya Yamasaki, Hiroyuki Fukuda, Hideo Funaoi

1.13 **OASIS: Designing CSCL to support argumentation**
Jingyan Lu, Nancy Law, Liping Deng, Yeung Lee

1.14 **SECI-driven problem-based learning for cultivating technological pedagogical content knowledge**
Meng Yew Tee, Shuh Shing Lee

1.15 **Parcours - Teaching Primary School Children Logical Thinking and Coordination Skill through a Collaborative Smart Table Game**
Patrick Dohrmann, Niels Pinkwart, Andreas Rausch, Alke Jurgens, Tim Warnecke

1.16 Dialogic Framework for Creative and Collaborative Problem-solving
Deller Ferreira, Rupert Wegerif

1.17 DESIGN STUDY ON ALGEBRA REFORM: A GENSING PROJECT
Sarah Davis, Suzanne Nelson, David Effendi

1.18 Can participation and procrastination in discussion forums predict project performance in computer science courses?
Jaebong Yoo, Erin Shaw, Jihie Kim

1.19 Enhancing Computer-Supported Case-Based Learning for Pre-Service Teachers: Effects of Hyperlinks to Conceptual Knowledge and Multiple Perspectives
Jan Zottmann, Frank Fischer, Annika Goeze, Josef Schrader

1.20 Vegetation Interaction Game: Digital SUGOROKU to Learn Vegetation Succession for Children
Akiko Deguchi, Fusako Kusunoki, Shigenori Inagaki, Etsuji Yamaguchi, Yoshiaki Takeda, Masanori Sugimoto

1.21 Discourse analysis of collaborative meaning making in CSCL
Shaoming Chai, Jianhua Zhao, Su Mu

1.22 Reflective practice on online collaborative learning and knowledge building in campus-based teacher education courses
Therese Laferriere, Christine Hamel, Stephane Allaire

1.23 Exploring Student Understanding of Complex Causality in an Ecosystems-Based Multi-User Virtual Environment
M. Shane Tutwiler, Tina Grotzer, Amy Kamarainen, Shari Metcalf, Chris Dede

1.24 Increasing International Capacity for CSCL: CoReflect, an Example of Sharing and Adapting CSCL Environments across Europe
Iris Tabak, Itay Asher, Samira Nasser, Eleni Kyza, Christothea Herodotou, Iolie Nicolaido, Andreas Redfors, Lena Hansson, Maria Rosberg, Cally Oldershaw, Constantinos Constantinou, Hans van der Meij, Sascha Schanze, Ulf Saballus, Vassilis Kollias

1.25 Experiencing, Conducting, Designing and Evaluating Polyphony in CSCL Chats
Stefan Trausan-Matu

1.26 GroupNotes: Encouraging Proactive Student Engagement in Lectures through Collaborative Note-taking on Smartphones
Mark Reilly, Haifeng Shen

1.27 Crafting Identities: E-Textile Artifacts as Mediators in High Tech Communities
Deborah Fields, Yasmin Kafai

1.28 Collaborative knowledge building for understanding science concepts
Pei-Chen Tsai, Huang-Yao Hong, Chieh-Hsin Chiu, Ming Hong

1.29 Design and Development of a Formative Assessment Tool for Knowledge Building and Collaborative Learning
Jan van Aalst, Carol K. K. Chan, Yuen-Yan Chan, Wing-San Wan, Stella Tian

1.30 Live linking of fieldwork to the laboratory increases students inquiry based reflections
Anne Adams, Tim Coughlan, Yvonne Rogers, Trevor Collins, Sarah Davies, Canan Blake, John Lea

1.31 Learning Technology by Collaborative Design and Evaluation
Chun Hu, Wai Yat Wong, Vilma Fyfe

1.32 Learners' Ideas about Plate Tectonics and Collaborative Game Play
Beaumie Kim, Xueli Wang, Mi Song Kim

1.33 Increasing anonymity in peer assessment using classroom response technology
Annelies Raes, Tammy Schellens, Ellen Vanderhoven

1.34 It's not only words that constitute conversation — analyzing a collaboration process while reflecting
Sarah Hundertmark, Sascha Schanze

08:00-08:45 Tai Chi Class — **MBPodium**

08:00-08:45 JLS Board Meeting (Closed) — **KKL**

09:00-10:00 Keynote 3 — **LE1**

On the importance of being open...
Prof. Erik DUVAL, *Professor of computer science, K.U.Leuven, Belgium*

Chair: Hans Spada, University of Freiburg
Respondent: Daniel SUTHERS, University of Hawaii

10:00-10:30 Morning break — **LE1foyer**

10:30-12:00 Parallel session 4

Long paper session 6: Knowledge Building — **LE2**
Chair: Naomi Miyake, University of Tokyo

Questioning and the Quality of Knowledge Ideas in a CSCL Context: A Study on Two Age-groups of Students
Ming Lai, Nancy Law

Location-based Collaborative Learning at a Geography Trail: Examining the Relationship among Task Design, Facilitation and Discourse Types
Esther Tan, Hyo-Jeong So

08:15-17:00 Registration open — **LE1foyer**

08:00-08:45 Tai Chi class — **MBpodium**

- At the podium on G/F, Main Building, HKU
- Open to all conference participants who are interested
- Free of Charge; Free walk in, no need for registration
- This is an introduction to Tai Chi and no pre-requisite is required. Classes on Thursday and Friday are identical and participants can join either or both lessons to experience this common practice among many Chinese people to do Tai Chi as a form of morning exercise for well-being.

18:00-22:00 Conference dinner

- At Jumbo Floating Restaurant, Aberdeen, Hong Kong Island
- For Participants who have registered for the dinner and paid the fees; Dinner coupon provided;
- The fee includes:
  - ✶ Transport from conference venue, HKU to the restaurant and return to HKU or Central MTR station
  - ✶ Full Chinese banquet (round-table setting)
  - ✶ Unlimited serving of house wine, beer and soft drinks during dinner time
  - ✶ Pre-dinner lessons on Chinese calligraphy and flour doll making
  - ✶ Entertainment and fun
- For details, please visit *http://www.isls.org/cscl2011/social-events.htm#conf-dinner*
- Jumbo Kingdom is one of Hong Kong's truly unique attractions. Since its opening in 1976 as the Jumbo Floating Restaurant, it has excelled in the preparation of Chinese food for discerning diners. The restaurant, designed like a classic Chinese palace, can accommodate up to 2,300 people. Situated in Aberdeen harbour, the Jumbo is one of the world's largest floating restaurants and a tourist icon.
- Gathering time and pick up point: **18:00** at the foyer of Hui Pun Hing Lecture Theatre, Library Extension Building (**LE1foyer**), HKU

Principle-Based Design for Collective Growth: From Knowledge Sharing to Explanatory Knowledge-Building Discourse
Carol Chan, Ella Fu

Does Contributing to a Knowledge Building Dialogue Lead to Individual Advancement of Knowledge?
Maria Chuy, Jianwei Zhang, Monica Resendes, Marlene Scardamalia, Carl Bereiter

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Symposium 6: Knowledge Building — LE1

A Principle-Based Approach to Knowledge Building: Processes, Challenges, and Implications
Jianwei Zhang, Marlene Scardamalia, Carol Chan, Jan van Aalst, Yuen Han Fung, Hidy Tse, Elizabeth Morley, Richard Messina, Janet Kolodner

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Long paper session 7: Learning activities and tools — LE3

Chair: Claire O'Malley, University of Nottingham

Weather Gods and Fruit Kids — Embodying abstract concepts using tactile feedback and Whole Body Interaction
Carolina Johansson, Zeynep Ahmet, Jakob Tholander, Franc Aleo, Martin Jonsson, Saiful Sumon

Improving the mCSCL Approach of a Mobile Chinese Character Forming Game via a Design-based Research Cycle
Lung-Hsiang Wong, Ivica Boticki, Jizhen Sun, Chee-Kit Looi

NumberNet: Using Multi-Touch Technology to Support Within and Between-Group Mathematics Learning
Andrew Hatch, Steve Higgins, Andrew Joyce-Gibbons, Emma Mercier

Collaborative Gaze Footprints: Correlates of Interaction Quality
Patrick Jermann, Dejana Mullins, Marc-Antoine Nüssli, Pierre Dillenbourg

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Long paper session 8: Learning interactions — LE6

Chair: Daniel Suthers, University of Hawaii

How a Virtual Math Team Structured its Problem Solving
Gerry Stahl

Constructing Part-task Congruent Representations to Support Coordination of Collaborative Problem-solving Tasks
Bert Slof, Gijsbert Erkens, Paul A Kirschner

Virtual Mathematical Inquiry: Problem Solving at the Gestural — Symbolic Interface of Remote-Control Embodied-Interaction Design
Dragan Trninic, Jose Gutierrez, Dor Abrahamson

How are students' problems being solved? The quality of worked solutions on a popular open, online, mathematics, help forum
Carla van de Sande

Long paper session 9: Technology-enhanced interactions & analysis — LE7

Chair: Ulrike Cress, Knowledge Media Research Center

Fostering Social Navigation and Elaboration of Controversial Topics with Preference-Inconsistent Recommendations
Christina Schwind, Jurgen Buder, Friedrich W. Hesse

Adaptable Scripting in Computer-Supported Collaborative Learning to Foster Knowledge and Skill Acquisition
Xinghua Wang, Ingo Kollar, Karsten Stegmann, Frank Fischer

Explaining the Effects of Continuous and Faded Scripts on Online Search Skills: The Role of Collaborative Strategy Practice
Christof Wecker, Ingo Kollar, Frank Fischer

Conversational Strategies that Support Idea Generation Productivity in Groups
Rohit Kumar, Jack Beuth, Carolyn Rose

Long paper session 10: Issues in CSCL — LE8

Chair: Chee-Kit Looi, Nanyang Technological University

Unfolding experienced teachers' pedagogical practices in technology-enhanced collaborative learning
Minna Lakkala, Liisa Ilomaki

Classroom orchestration: The third circle of usability
Pierre Dillenbourg, Guillaume Zufferey, Hamed Alavi, Patrick Jermann, Son Do-Lenh, Quentin Bonnard, Sebastien Cuendet, Frederic Kaplan

Mind the Gaps: Using Patterns to Change Everyday Classroom Practice Towards Contingent CSCL Teaching
Luis P. Prieto, Sara Villagra-Sobrino, Yannis Dimitriadis, Patricia Schank, William Penuel, Angela Haydel DeBarger

Learning Design as a Medium for Scaffolding Teacher Learning and Collaboration
Nancy Law, Diana Laurillard, Yeung Lee

Interactive events session 10: CSCL in school subjects — LE5

Designing visual tools to scaffold the process of learning how to learn together
Reuma De-Groot, Baruch Schwarz, Rupert Wegerif, Yang Yang, Andreas Harrer, Chronis Kynigos, Bruce McLaren, Manolis Mavrikis

12:00-13:00 Lunch — FSC2

13:00-14:30 Parallel session 5

Invited Presidential Session — LE6

Honoring Janet Kolodner
Chair: Iris Tabak and Sadhana Puntambekar
Introduction: Paul Kirschner
Presenters: Roland Hubscher, Sadhana Puntambekar, Cindy Hmelo-Silver, Yasmin Kafai, Chris Hoadley
Remarks: Janet Kolodner
Open Discussion

Symposium 7: Knowledge Building — LE2

Fostering Conceptual Change with Technology: Asian Perspectives
Chwee Beng Lee, David Jonassen, Seng Chee Tan, Naomi Miyake, Jan Van Aalst, Peter Reimann

Symposium 8: Learning activities and tools — LE3

MUPEMURE: Towards a Model of Computer-Supported Collaborative Learning with Multiple Representations
Daniel Bodemer, Manu Kapur, Gaelle Molinari, Nikol Rummel, Armin Weinberger

Symposium 9: Issues in CSCL — LE7

CSCL and Innovation: In Classrooms, With Teachers, Among School Leaders, In Schools of Education
Jeremy Roschelle, Charlie Patton, Patricia Schank, William Penuel, Chee-Kit Looi, Wenli Chen, Anwar Chan, Luis Prieto, Sara Villagra-Sobrino, Yannis Dimitriadis

Symposium 10: Issues in CSCL — LE8

Embedding CSCL in Classrooms: Conceptual and Methodological Challenges of Research on New Learning Spaces
Jim Slotta, Mike Tissenbaum, Michelle Lui, Iyad Alagha, Elizabeth Burd, Steve Higgins, Emma Mercier, Frank Fischer, Florian Pilz, Ingo Kollar, Tom Moher, Alessandro Gnoli, Allison Jaeger, Jennifer Wiley, Brenda López Silva, Michael Evans, Andrea Motto, Adrienne Brunger, Jeremy Crider, Jay Wilkins

Symposium 11: Knowledge building — LE1

Strengthening the Conceptual Foundations of Knowledge Building Theory and Pedagogy
Katerine Bielaczyc, Kai Hakkarainen, Guiseppe Ritella, Pirita Seitamaa-Hakkarainen, Gerry Stahl, Marlene Scardamalia, Carl Bereiter

Interactive events session 11: Technology & pedagogy co-design — LE4

Teacher as co-designer in developing technology that supports Liberal Studies learning
Nancy Law, Yeung Lee, S. M. Kwok, Bonnie Lam, K. C. Ho

Interactive events session 12: CSCL in school subjects — LE5

Accelerating Learning to Write with Reciprocal Peer Review
Kwangsu Cho, Jungtaek Im, Namseok Lee, Ho-Chul Shin

14:30-16:00 Parallel session 6

Long paper session 11: Knowledge Building — LE2

Chair: Stefan Trausan-Matu, Politehnica University of Bucharest

Knowledge Construction Patterns in Online Conversation: A Statistical Discourse Analysis of a Role-Based Discussion Forum
Alyssa Friend Wise, Ming Ming Chiu

Quantified Measures of Online Discourse as Knowledge Building Indicators
Jianwei Zhang, Yanqing Sun

Critical Moments of Knowledge Co-construction: Reconsidering Meaning-making of Postings in Online Group Discussion
Hsiu-Mei Chang, Fei-Ching Chen, Kai-Tien Cheng, Ren-Yow Tzeng

Towards an Understanding of "Listening" in Online Discussions: A Cluster Analysis of Learners' Interaction Patterns
Alyssa Friend Wise, Farshid Marbouti, Jennifer Speer, Ying-Ting Hsiao

Long paper session 12: Learning activities and tools — LE3

Chair: Susan Yoon, University of Pennsylvania

Training in Virtual Training Environments: Connecting Theory to Practice
Johannes Moskaliuk, Johanna Bertram, Ulrike Cress

Analyzing discourse synthesis - use of semantic information for collaborative writing in secondary education
Crina Damsa, Gijsbert Erkens, Jeroen Janssen

Online Role Play Simulation to tackle Groupthink — Case study of a crisis management training
Lawrence LEUNG, Nancy LAW

Play and Augmented Reality in Learning Physics: The SPASES Project
Noel Enyedy, Joshua Danish, Girlie Delacruz, Melissa Kumar, Sylvia Gentile

Long paper session 13: Learning interactions — LE6

Chair: Joachim Kimmerle, University of Tuebingen

Fostering Representational Competence Through Argumentation with Multi-Representational Displays
Mike Stieff

Guiding the Process of Argumentation: The Effects of Ontology and Collaboration
Frank Loll, Niels Pinkwart

The Role of Argumentation for Domain-Specific Knowledge Gains in Computer-Supported Collaborative Learning: A Meta-Analysis
Christof Wecker, Frank Fischer

Technology and Dialogic Space: Lessons from History and from the 'Argunaut' and 'Metafora' Projects
Rupert Wegerif, Yang Yang

Long paper session 14: Technology-enhanced interactions & analysis — LE7

Chair: Patrick Jermann, Ecole Polytechnique Fédérale de Lausanne

The Myth of Over-scripting: Can Novices be Supported too much?
Karsten Stegmann, Jin Mu, Vera Gehlen-Baum, Frank Fischer

A Scaffolded Software Tool for L2 Vocabulary Learning: GroupScribbles with Graphic Organizers
Wenli Chen, Chee Kit Looi, Yun Wen

Orchestrating Web-Based Collaborative Inquiry Learning with Small Group and Classroom Scripts
Ingo Kollar, Christof Wecker, Sybille Langer, Frank Fischer

Scripting Collaborative Learning in Smart Classrooms: Towards Building Knowledge Communities
Michelle Lui, Mike Tissenbaum, James D. Slotta

Long paper session 15: Issues in CSCL — LE8

Chair: Cindy Hmelo-Silver, Rutgers University

Seeing what we mean: Co-experiencing a shared virtual world
Gerry Stahl, Nan Zhou, Murat Perit Cakir, Johann Sarmiento-Klapper

Is CSCL the missing link between education and the 21st century economy?
Jeremy Roschelle, Charles Patton, Yukie Toyama

A Portrait of CSCL Methodologies
Heisawn Jeong, Cindy Hmelo-Silver

Technology-mediated reflection and peer-exchange: Supports for teacher professional development communities
Cheryl Ann Madeira, James D. Slotta

Interactive events session 13: Knowledge building — LE1

Automated Data Analysis to Support Teacher's Knowledge Building Practice
Leng Jing, Johnny Yuen, Wing Wong, Nancy Law, Yonghe Zhang, Stephane Allaire, Christian Perreault, Therese Laferriere, Christopher Teplovs

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Interactive events session 14: Technology & pedagogy co-design — LE4

Design and Technologies for Supporting Collaborative Learning with Multiple Representations
Gaelle Molinari, Daniel Bodemer, Manu Kapur, Nikol Rummel, Armin Weinberger

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Interactive events session 15: CSCL in school subjects — LE5

Action research on the effectiveness of partnership collaboration in ICT language projects
Henry Ha, Jane Yip, Ka Tim Chu, Shirley Lit, Chi Kin Chow

16:00-16:30 Afternoon break — LYH

16:30-18:00 Poster session 2 — LYH

2.1 Formative Evaluation of Activity Structures for a Middle School Climate Change Curriculum
Vanessa Peters, Nancy Songer

2.2 A Web-based Doctoral Program to Develop Culturally Responsive Special Education Faculty
Patricia Peterson, Stephen Showalter

2.3 My-Pet-My-Quest:Using Authoring Tool in Open Content Environment to Extend Learning Quests
Charles Y. C. Yeh, Zhi-Hong Chen, Calvin C. Y. Liao, Tak-Wai Chan

2.4 PreK Teachers & Students Using Multi-Touch Virtual Manipulatives: An Analysis of Usability and Learner-centered Design
Michael A. Evans, Jeremy Crider, Andrea Motto, Adrienne Brunger, Jesse L.M. (Jay) Wilkins

2.5 Designing course management system into CSCL tools: Experience with Moodle
Jingyan Lu, Nancy Law

2.6 Computer Support for Collaborative Reflection on Captured Teamwork Data
Kristin Knipfer, Michael Prilla, Thomas Herrmann, Ulrike Cress

2.7 Factors affecting students' performance in a supportive e-learning system — eCIS: an exploratory study
Ching-Huei Chen, I-Chia Wu

2.8 Expanding the role of design to support CSCL
Daniel Spikol

2.9 A Supporting System for Pupils' Question-Posing and Peer-Assessment
Zhi-Hong Chen, Euphony F. Y. Yang, Hsiu-Mei Chang, Chih-Mao Chen, Tak-Wai Chan

2.10 Orchestrating CSCL - More Than a Metaphor?
Ingo Kollar, Raija Hamalainen, Michael A. Evans, Bram De Wever, Carlo Perrotta

2.11 Epistemic mediation, chronotope, and expansive knowledge practices
Kai Hakkarainen, Giuseppe Ritella, Pirita Seitamaa-Hakkarainen

2.12 Upon the role of the teacher in the informal learning setting of an intercultural computer club
Anne Weibert, Birgit Sander, Kai Schubert

2.13 Exploring new directions in teachers' professional development: Monitoring teachers' fidelity of implementation of (argumentative) dialogue
Reuma De-Groot

2.14 Distinguishing Evolution Ideas Through Two Different Forms Of Collaborative Critique-Focused Concept Mapping Activities
Beat Schwendimann

2.15 Single- and Mixed-Gender Pairs' Help-Seeking and Domain-Knowledge Gains in Collaborative Inquiry-Learning Classroom
Kati Makitalo-Siegl, Frank Fischer, Carmen Kohnle

2.16 Engaging Learners in the Identification of Key Ideas in Complex Online Discussions
Jim Hewitt, Clare Brett

2.17 Does news value help learners sharing relevant information?
Anja Rudat, Jurgen Buder, Daniel Bodemer

2.18 Scaling Dynamic Mathematics Reform: Findings from the SunBay Pilot Study
Charles Vanover, George Roy, Zafer Unal, Vivian Fueyo, Nicole Collier, Phil Vahey

2.19 Visual Representations of Videotaped Interactions: Understanding Activity Patterns in the Classroom
Cheryl Ann Madeira, James D. Slotta

2.20 Modeling Efficient Grounding in Chat-based CSCL: An Approach for Adaptive Scripting?
Michael Oehl, Hans-Ruediger Pfister

2.21 Pearls of Wisdom: A Computational Scaffold for Design and Diffusion of Cognitive Artifacts
Robbin Chapman

2.22 Making Meaning and Building Understanding Online: Designing an Innovative and Participative Assessment
Gabriel B. Reedy

2.23 OASIS: An Online Professional Learning Community for Inquiry-based Teaching
Robbin Chapman, Shaundra Daily

2.24 Towards the Identification of Emergent Strategies for Interdependent Collaboration in Complex Tasks
Daniel Greene, Paulo Blikstein

2.25 GlobalEd 2: A Technology Mediated Simulation Targeted at Writing in the Disciplines
Kimberly Lawless, Scott Brown, Mark Boyer

2.26 Developing Collaborative Argumentation Systems: What Advice Do the Experts Have?
Frank Loll, Niels Pinkwart, Oliver Scheuer, Bruce McLaren

2.27 Learning about Ecosystems in a Computer Supported Collaborative Learning Environment
Sameer Honwad, Cindy Hmelo-Silver, Rebecca Jordan, Suparna Sinha, Catherine Eberbach, Ashok Goel, Spencer Rugaber

2.28 Collaborative Learning with Scaffolded Dynamic Visualizations
Jennifer Chiu

2.29 Improving Collaboration through Visibility of Students' Learning Products in a Digital Classroom Environment
Juan Carlos Hernandez, Luis Facundo Maldonado, Widman Said Valbuena, H. Ulrich Hoppe

2.30 Explanatory Activity with a Partner Promotes Children's Learning from Multiple Solution Methods
Miho Kawasaki, Hajime Shirouzu

2.31 Collaborative Design Process of a Rich Interactive Web-based Interprofessional Pain Education Resource
Michelle Lui, Judy Watt-Watson, Leila Lax, Adam Dubrowski, Michael McGillion, Judith Hunter, Kerry Knickle, Cameron MacLennan, Anja Robb, Jaime Lapeyre

2.32 Talking Like a Composer: Negotiating shared musical compositions using Impromptu
Michael Downton, Kylie Peppler, Jeanne Bamberger

2.33 Tabletop Teaching Simulation: Collaborative Multivoiced Simulation for Improving Lesson Plans in Pre-service Training
Toshio Mochizuki, Hiroshi Sasaki, Yoshihiko Kubota, Hideyuki Suzuki

2.34 Agreeing to Disagree: Challenges with Ambiguity in Visual Evidence
Camillia Matuk, Elissa Sato, Marcia Linn

2.35 Facilitating Knowledge Communities in Science Classrooms through Scripted Collaboration
Hedieh Najafi, Naxin Zhao, James Slotta

2.36 Ways of Contributing to a Knowledge-Building Dialogue in History
Monica Resendes, Maria Chuy, Bodong Chen, Marlene Scardamalia

2.37 An Educational Perspective: Research Through Design
Heidrun Allert, Christoph Richter

2.38 An Analysis of Teacher-Students Interactions in Three Science Classes: A Pilot Study
Naxin Zhao, Hedieh Najafi, James Slotta

2.39 Advancing a Complex Systems Approach to Personalized Learning Communities: Bandwidth, Sightlines, and Teacher Creativity
Eric Hamilton

2.40 New forms of collaborative repository development involving students, teachers, and Japanese lesson study
Eric Hamilton

08:00-08:45 Tai Chi Class — **MBPodium**

08:00-08:45 ijCSCL Board Meeting (Closed) — **KKL**

09:00-10:00 Keynote 4 — **LE1**

CSCL Opportunities and Challenges in the Context of the US National Educational Technology Plan
Prof. Roy PEA, *Stanford University Professor of the Learning Sciences, and Director of the Stanford Center for Innovations in Learning*

Chair: Gerry Stahl, Drexel University
Respondent: Chan Tak Wai, National Central University of Taiwan

10:00-10:30 Morning break — **LE1foyer**

10:30-12:00 Parallel session 7

Short paper session 6: Knowledge Building — **LE2**
Chair: Rick Alterman, Brandeis University

Context Aware CSCL: Moving Toward Contextualized Analysis
Sean P. Goggins, James Laffey, Chris Amelung

Capturing and analysing the processes and patterns of learning in collaborative learning environments
Kate Thompson, Shannon Kennedy-Clark, Lina Markauskaite, Vilaythong Southavilay

Social Skills as Predictors of Satisfaction and Performance in a Project-based Learning CSCL Environment: An Empirical Study
Michele P. Notari, Adrian Baumgartner

Seven Challenges in CSCL
Ravi Vatrapu

Retelling Stories: Setting Learner Narratives in Resource Ecologies
Joshua Underwood, Rosemary Luckin, Niall Winters

Short paper session 7: Learning activities and tools — **LE3**
Chair: Christopher Hoadley, New York University

Taking Educational Games to the Afterschool: Teens and Researchers on a Quest in Collaborative Design-Based Research
Jacob Dayan, Yael Kali

Friday, July 8, 2011

08:15-15:00 Registration open — **LE1foyer**

08:00-08:45 Tai Chi class — **MBpodium**

- At the podium on G/F, Main Building, HKU
- Open to all conference participants who are interested
- Free of Charge; Free walk in, no need for registration
- This is an introduction to Tai Chi and no pre-requisite is required. Classes on Thursday and Friday are identical and participants can join either or both lessons to experience this common practice among many Chinese people to do Tai Chi as a form of morning exercise for well-being.

Utilizing a collaborative "Cross Number Puzzle" game on Group Scribbles to develop students' computing ability of addition and subtraction
Yen-Hua Chen, Tak-Wai Chan, Chee-Kit Looi, Yin-Juan Shao, Chiu-Pin Lin

Enhancement Effects of Online Edutainment Game-Play on Students' Scholastic Achievements in English and Mathematics
Diane Hui, Anthony R. Dickinson

How a New Actor Was Temporarily Enrolled Into the Network of Game Playing
Mark Chen

Allocentrism and Computational Thinking
Carmen Petrick, Matthew Berland, Taylor Martin

When a console game becomes CSCL: Play, participatory learning and 8-bit home computing in India
Derek Lomas, Dixie Ching, Christopher Hoadley, Kishan Patel, Matthew Kam

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Short paper session 8: Learning interactions **LE6**

Chair: Manu Kapur, National Institute of Educaction

Collaborative Problem Solving Processes in a Scenario-Based Multi-User Environment
Shannon Kennedy-Clark, Kate Thompson, Debbie Richards

Factors Contributing to Learners' Online Listening Behaviors in Online and Blended Courses
Alyssa Friend Wise, Jennifer Speer, Ying-Ting Hsiao, Farshid Marbouti

Supporting Argumentative Knowledge Construction in Face-to-Face Settings: From ArgueTable to ArgueWall
Sara Streng, Karsten Stegmann, Christine Wagner, Sonja Bohm, Frank Fischer, Heinrich Hussmann

Coding schemes as measurement instruments? An attempt to assess the psychometric properties of a coding scheme
Andri Ioannou, Agni Georgiou, Elena Papanastasiou

Collaboration in communities of inquirers: an example from a geography field trip
Eileen Scanlon, Canan Blake, Alison Twiner, Trevor Collins, Ann Jones, Lucinda Kerawalla

Exploring Joint Attention around Shared Referential Anchors during Physical, Virtual and Mixed Reality Laboratory Activities
Garrett Smith, Anushree Bopardikar, Sadhana Puntambekar

Short paper session 9: Technology-enhanced interactions & analysis **LE7**

Chair: Sten Ludvigsen, University of Oslo

Trustworthy in the Eye of the Beholder? — A Cognitive Perspective on Personal Profile Information in Virtual Project Teams
Ellen Rusman, Jan van Bruggen, Peter Sloep, Rob Koper, Martin Valcke

Detecting Collaboration Regions in a Chat Session
Dan Banica, Stefan Trausan-Matu, Traian Rebedea

Social Cues in Asynchronous Online Discussions: Effects of Social Metacognition and New Ideas
Gaowei Chen, Ming Ming Chiu, Zhan Wang

PolyCAFe: Collaboration and Utterance Assessment for Online CSCL Conversations
Mihai Dascalu, Traian Rebedea, Stefan Trausan-Matu, Gillian Armitt

E-Tutorial Support for Collaborative Online Learning: Differences between experienced and non-experienced E-tutors
Birgitta Kopp, Maria Cristina Matteucci, Carlo Tomasetto, Heinz Mandl

Analysis of Group Understanding in Artifact-Mediated Discourses
Heisawn Jeong, Wenli Chen, Chee-Kit Looi

Short paper session 10: Issues in CSCL **LE8**

Chair: Carol Chan, The University of Hong Kong

Using Online Communication Tools to Mediate Curriculum Development As A Collaborative Process
Lei Liu, Susan Yoon

Towards a model for rapid collaborative knowledge improvement in classroom language learning
Yun Wen, Chee-Kit Looi, Wenli Chen

Tabletops for Collaborative Learning: A Case Study on Geometry Learning at the Primary School
Gustavo Salvador-Herranz, David Perez-Lopez, Mario Ortega, Mariano Alcaniz, Manuel Contero

Productive re-use of CSCL data and analytic tools to provide a new perspective on group cohesion
Christophe Reffay, Christopher Teplovs, Francois-Marie Blondel

Expert Participation in Elementary Students' Collaborative Design Process
Kaiju Kangas, Pirita Seitamaa-Hakkarainen

Bridging Multiple Expertise in Collaborative Design for Technology-Enhanced Learning
Yael Kali, Lina Markauskaite, Peter Goodyear, Mary-Helen Ward

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INTERACTIVE EVENTS SESSION 16: KNOWLEDGE BUILDING **LE1**

Knowledge Building International Project : Designs for Deep Understanding
Thérèse Laferrière, Mireia Montané, Nancy Law, Oscar Hernandez Lopez, Christian Perreault, Pier-Ann Boutin, Johnny Yuen, Pere Boluda, Marta Blancafort

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INTERACTIVE EVENTS SESSION 17: TECHNOLOGY & PEDAGOGY CO-DESIGN **LE4**

Supporting innovative teaching and responding to change with an intelligent collaborative design environment
Dejan Ljubojevic, Brock Craft, Diana Laurillard

INTERACTIVE EVENTS SESSION 18: CSCL IN SCHOOL SUBJECTS **LE5**

School Network for Enhancing Student Information Literacy Across the Curriculum
Ching Yin Kwok, Siu Fan Lau, Yin Wai Yvonne Choi, Lok Sze Chan

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12:00-13:30 ISLS COMMITTEE MEETINGS **FSC2 (Marked tables)**

12:00-13:30 LUNCH **FSC2**

13:30-15:00 PARALLEL SESSION 8

LONG PAPER SESSION 16: KNOWLEDGE BUILDING **LE2**
Chair: Diane Hui, The University of Hong Kong

Socially constructive interaction for fostering conceptual change
Moegi Saito, Naomi Miyake

Effects of Using Multiple Forms of Support to Enhance Students' Collaboration during Concept Mapping
Anushree Bopardikar, Dana Gnesdilow, Sadhana Puntambekar

Weblines: Enabling the Social Transfer of Web Search Expertise using User-Generated Short-form Timelines
Neema Moraveji, Salman Ahmad, Chigusa Kita, Frank Chen, Sep Kamvar

Facilitating Web Design Skills through Online Design-Based Learning: The Case of Collaboration Scripts and Incomplete Concept Maps
Walid El-Refai, Ingo Kollar, Frank Fischer

SYMPOSIUM 12: KNOWLEDGE BUILDING **LE1**

Enhancing the Social and Cognitive Benefits of Digital Tools and Media
Therese Laferriere, Marjut Viilo, Pirita Seitamaa-Hakkarainen, Kai Hakkarainen, Jun Oshima, Marlene Scardamalia, Carl Bereiter, Bodong Chen, Maria Chuy, Monica Resendes, Jan van Aalst, Carol Chan, Katerine Bielaczyc, Huang-Yao Hong, Jianwei Zhang

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SYMPOSIUM 13: LEARNING ACTIVITIES AND TOOLS **LE3**

Integrated tool support for learning through knowledge creation
Sten Ludvigsen, Crina Damsa, Hanni Muukkonen

Long paper session 17: Learning interactions — LE6

Chair: Marcia Linn, University of California Berkeley

The Relationships among Online Question-Generation, Peer-Assessment and Academic Achievement
Fu-Yun Yu, Chun-Ping Wu

Using a Reflection Tool to Increase Reliability of Peer Assessments in a CSCL Environment
Chris Phielix, Frans Prins, Jeroen Janssen, Paul Kirschner

Adaptive support for CSCL: Is it feedback relevance or increased student accountability that matters?
Erin Walker, Nikol Rummel, Kenneth R. Koedinger

Long paper session 18: Technology-enhanced interactions & analysis — LE7

Chair: Jianwei Zhang, University at Albany, SUNY

Mind the gap: Differences between the aspirational and the actual in an online community of learners
Karen Brennan

Rating dimensions of collaboration quality in synchronous collaborating dyads: findings and interpretations
Georgios Kahrimanis, Irene-Angelica Chounta, Nikolaos Avouris

Technological affordances for productive multivocality in analysis
Gregory Dyke, Kristine Lund, Heisawn Jeong, Richard Medina, Daniel D. Suthers, Jan van Aalst, Wenli Chen, Chee-Kit Looi

The automatic assessment of knowledge integration processes in project teams
Gahgene Gweon, Pulkit Agrawal, Mikesh Udani, Bhiksha Raj, Carolyn Rose

Symposium 14: Technology-enhanced interactions & analysis — LE8

How Can Current Approaches to the Transfer of Technology-Based Collaboration Scripts for Research and Practice Be Integrated?
Karsten Stegmann, Christof Wecker, Andreas Harrer, Michaela Ronen, Dan Kohen-Vacs, Yannis Dimitriadis, Davinia Hernandez-Leo, Eloy Fernandez, Juan Asensio-Perez, Frank Fischer

Interactive events session 19: CSCL in school subjects — LE4

SimScientists: Using Science Simulations to Promote Model-Based Learning and Assessment
Edys S. Quellmalz, Barbara Buckley

Interactive events session 20: CSCL in school subjects — LE5

An Interactive Research Experience with Mobile Biology Games — Part 2
Eric Klopfer, Judy Perry, Louisa Rosenheck

15:00-15:30 Afternoon break — **LE1foyer**

15:30-17:00 Closing Ceremony & ISLS Open Business Meeting — **LE1**

Notes

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The University of Hong Kong
Strategic Research Theme – Sciences of Learning

The Strategic Research Theme (SRT) Sciences of Learning is among the 19 constituent themes established under the strategic research area in *Community*. It is led by an advisory group and facilitated by the co-conveners Dr. Carol K. K. Chan and Professor Kai-Ming Cheng in the University of Hong Kong (HKU). As at today, the SRT Sciences of Learning has built up a community of active members from a variety of Faculties and Centres at HKU, and affiliated members from local, government and international institutions.

Why Sciences of Learning?

The idea of a learning society, where learning, innovation and knowledge creation are valued, is increasingly regarded as essential for preparing citizens to meet the needs of changing societies for 21st century education. Against this global background, Sciences of Learning (Figure 1) has emerged as a new interdisciplinary field of scientific inquiry into learning. It involves systematic and cross-disciplinary investigations to develop a scientific basis for understanding the processes of learning and for designing and improving human learning. At HKU, scholars have made major contributions to the understanding of learning locally and internationally. They are now pooling their expertise to explore ways of further advancing research on learning, drawing on expertise from a variety of Faculties including Education, Social Sciences, Arts, Engineering, the Li Ka Shing Faculty of Medicine, and Centres such as the Centre for the Enhancement of Teaching and Learning and Institute of Human Performance. Under the SRT Sciences of Learning and its 6 key research sub-themes (Figure 2), we are developing a scientific basis of knowledge about learning.

Figure 1. A framework of Sciences of Learning

Figure 2. Sub-themes of the SRT Sciences of Learning

Activities

Network events for research and collaborations, research grants and outputs involving crossdisciplinary projects, international conferences, seminars, curriculum reform and knowledge exchange, training opportunities for postgraduate students and postdoctoral fellows.

Co-conveners

Dr. Carol K. K. Chan, Professor Kai-Ming Cheng, Faculty of Education, The University of Hong Kong

If you are interested in learning more, or joining the SRT Sciences of Learning at HKU, please visit: http://sol.edu.hku.hk

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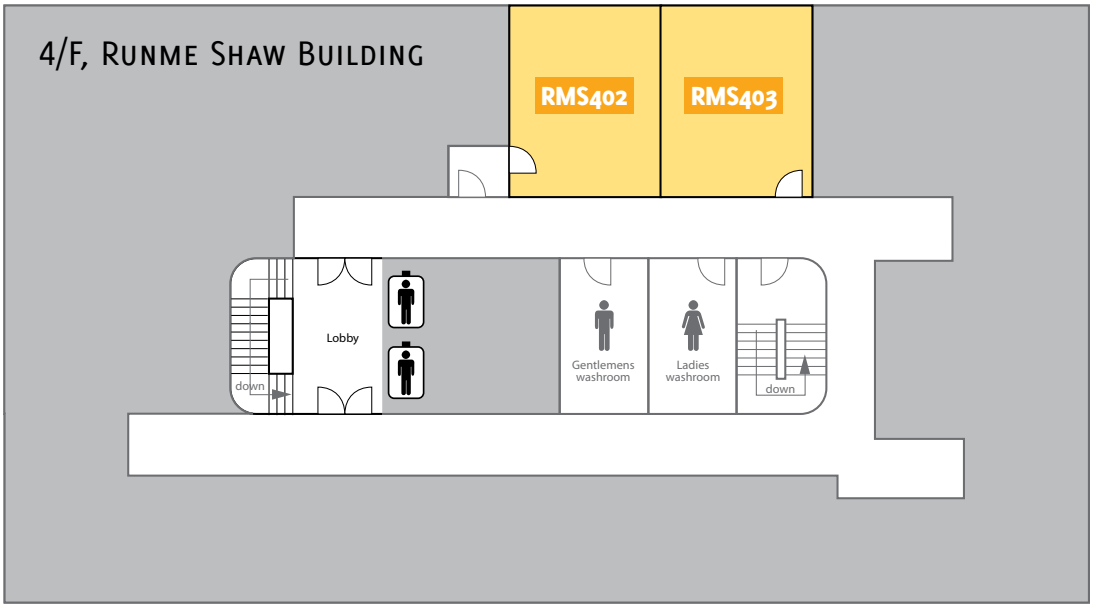
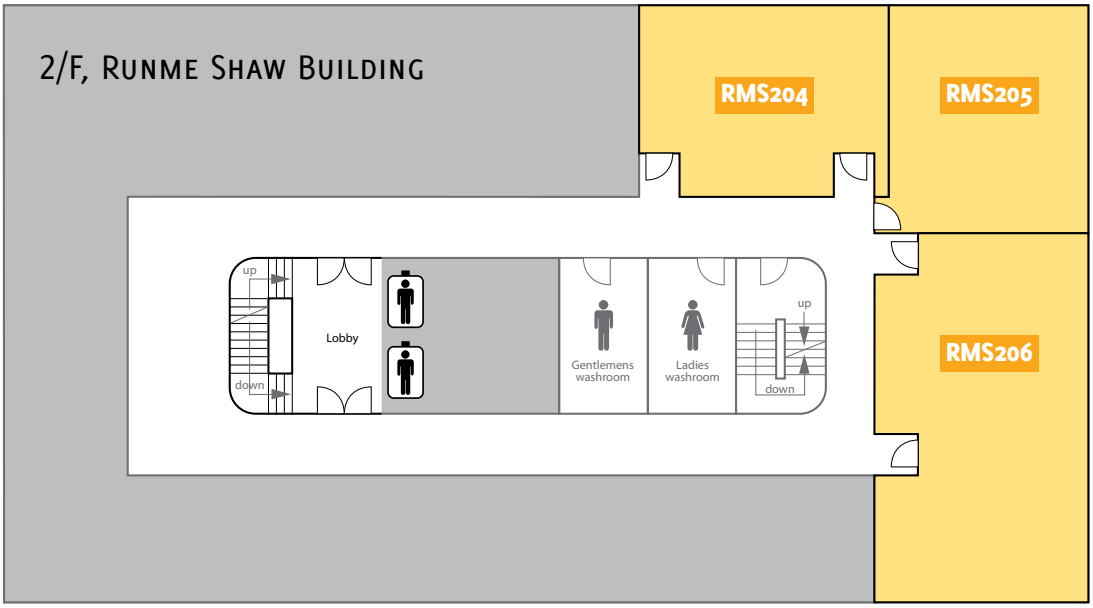
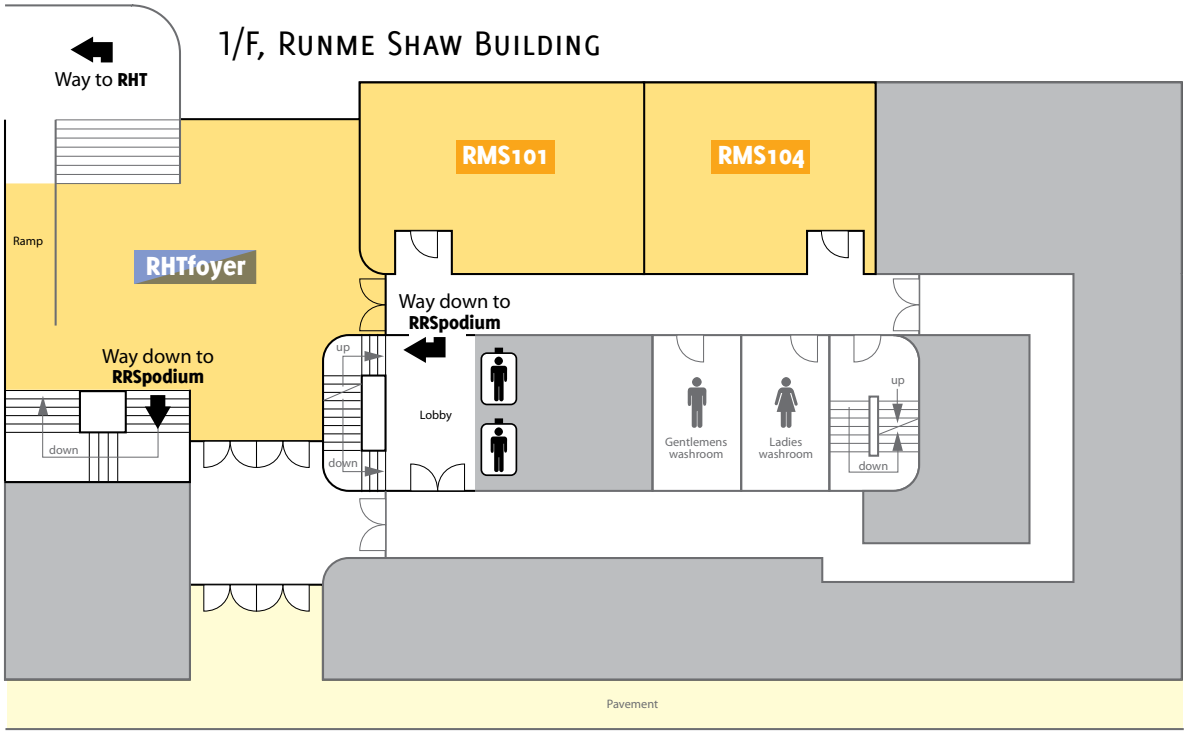
Take route A11 to Jardine House or City Hall at Central, then take bus no. 3B, 40M, or 103 or green minibus no. 8, 10A or 22. Take off at HKU East Gate, Bonham Road.

By Taxi

Costs about HK$400 and takes about 45 minutes. You are advised to alight at the drop-off points near the venues. Please show the taxi card on the last page of this booklet to taxi drivers.







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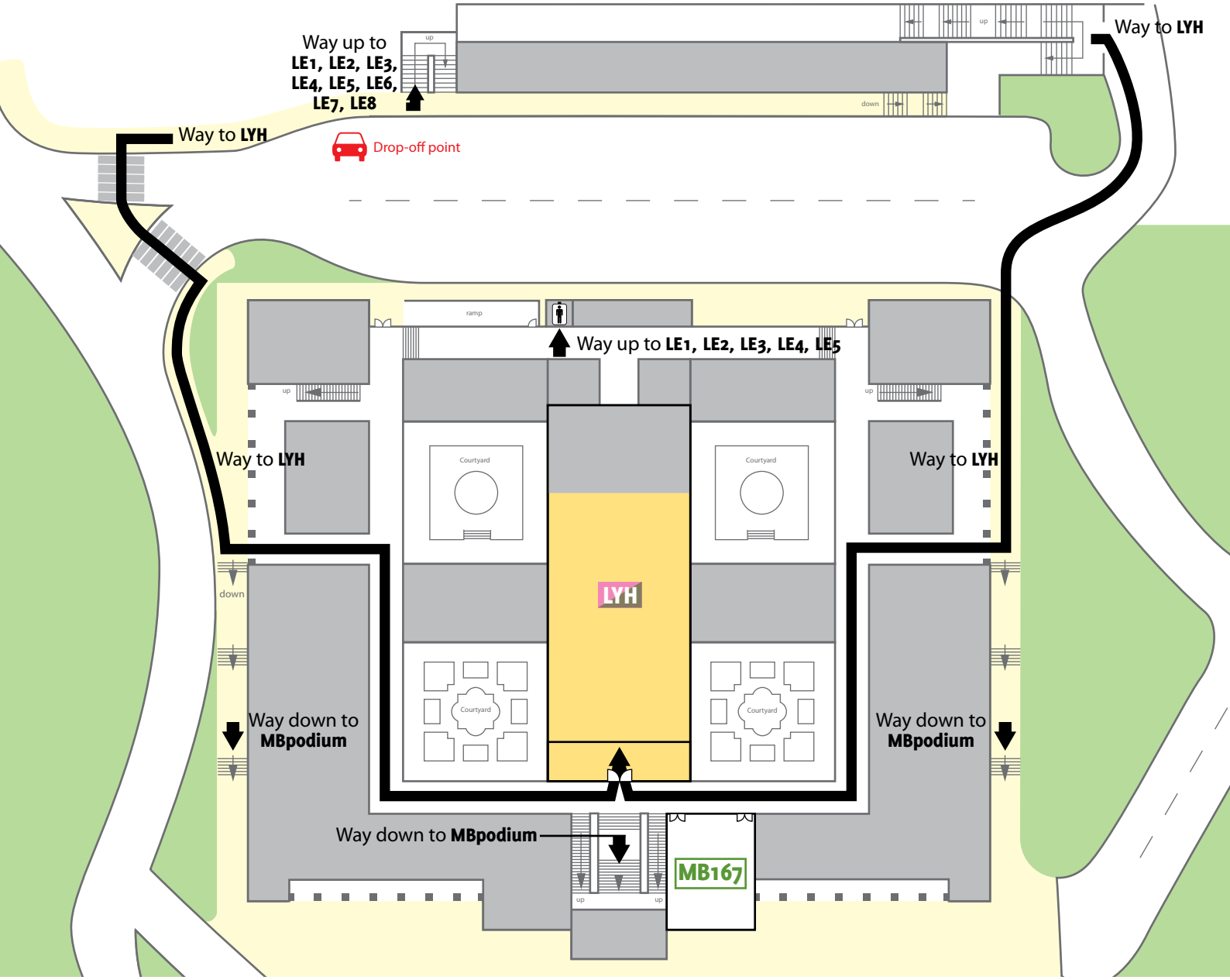
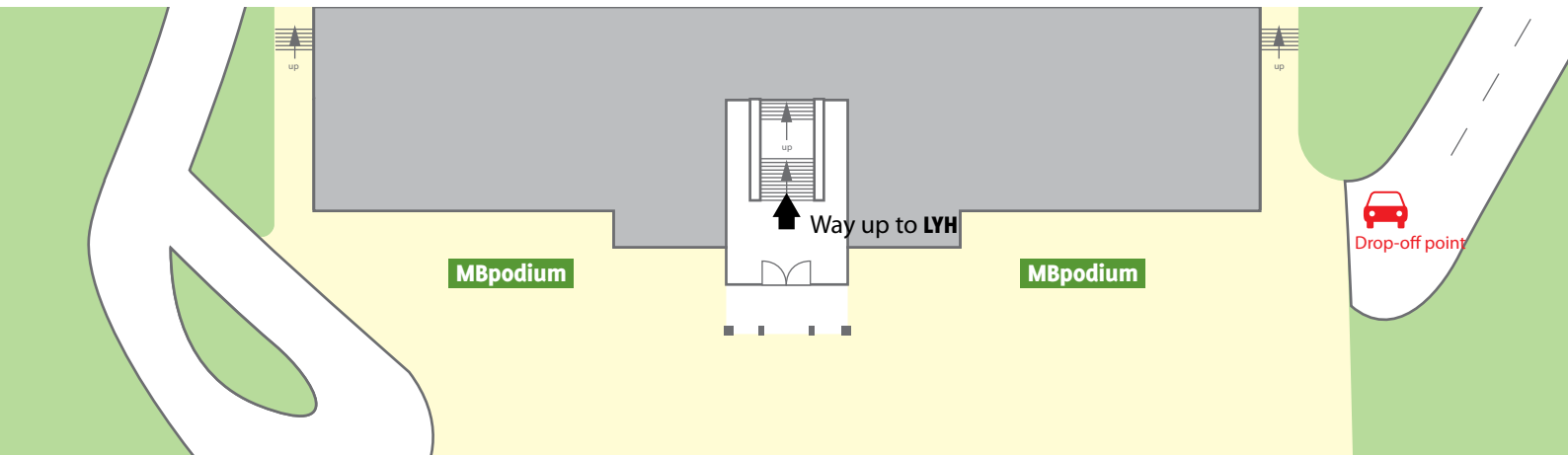
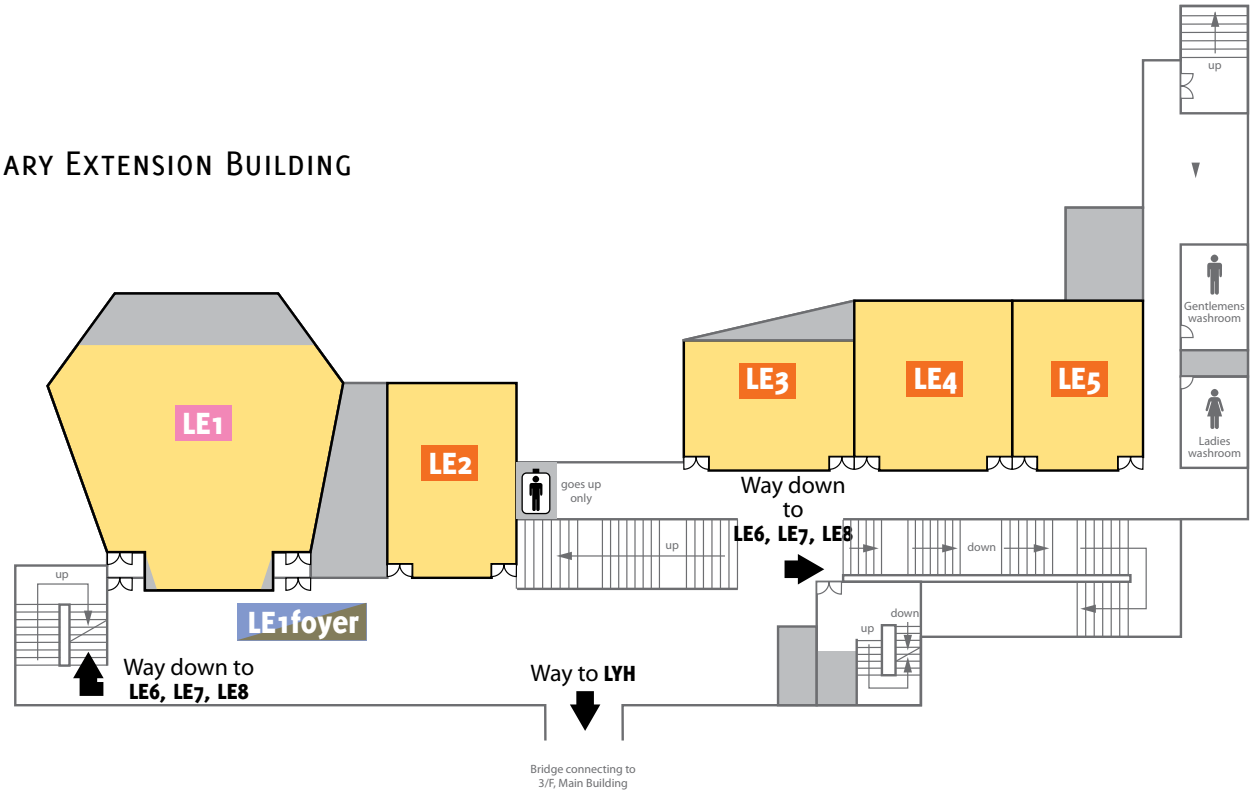


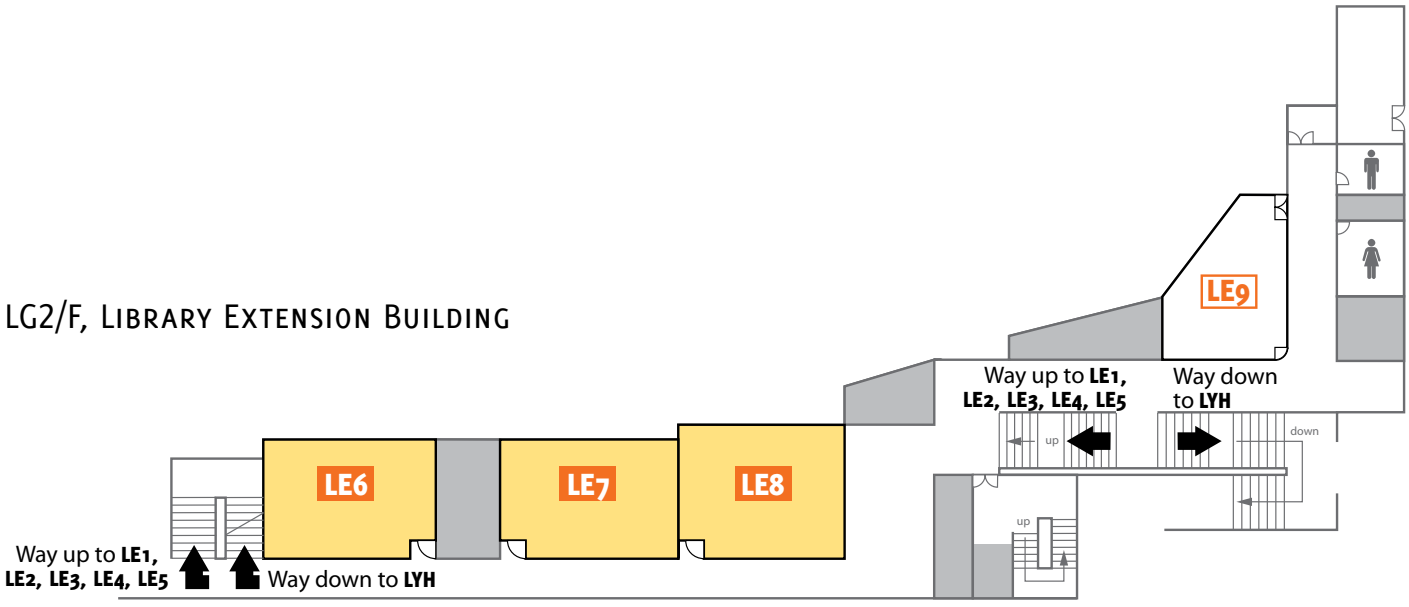
G/F & podium, Main Building



LG1/F, Library Extension Building



LG2/F, Library Extension Building



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p.41
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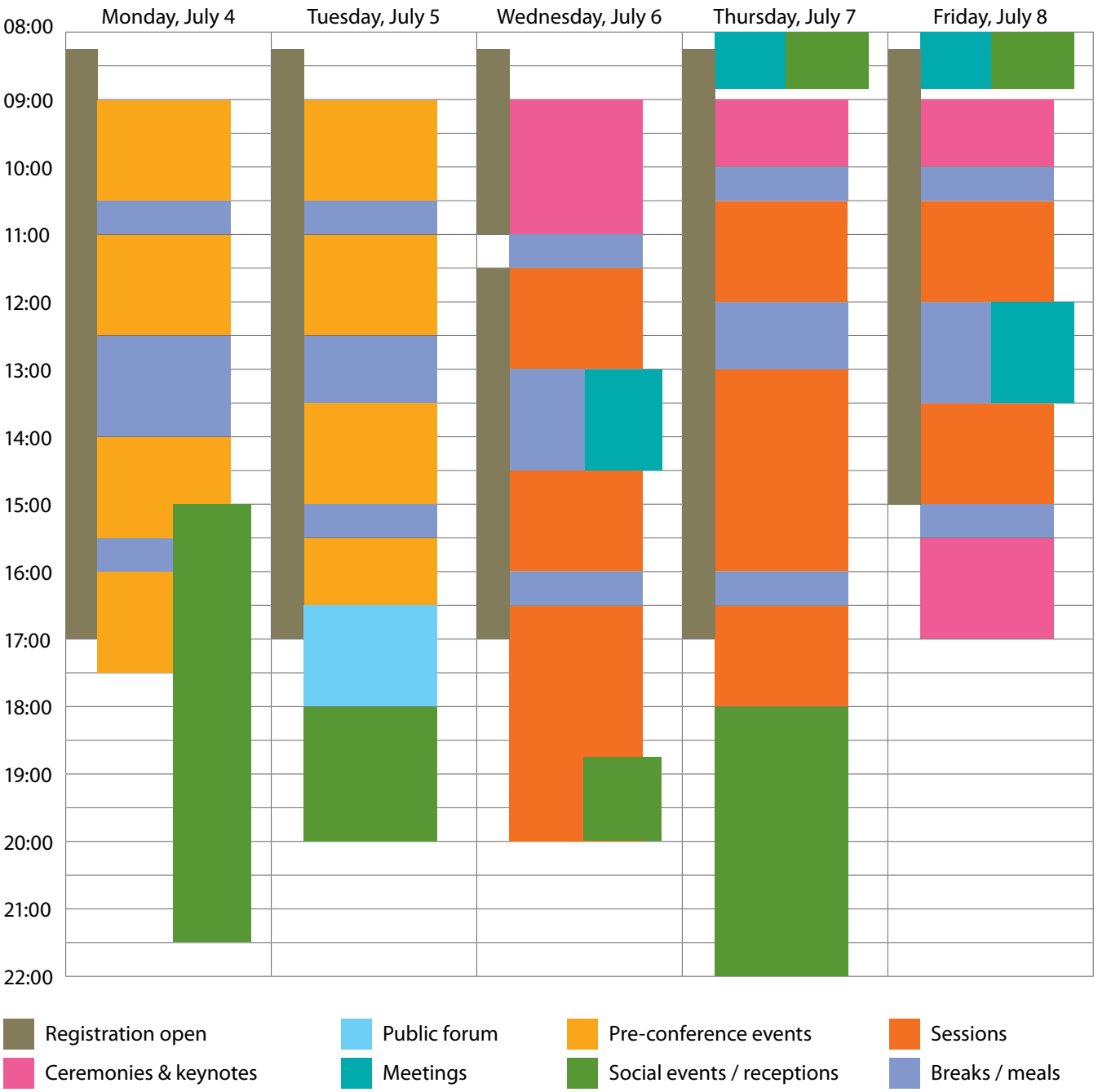
Conference at a glance