

**ICCE/ICCAI 2000**  
8th International Conference on Computers in Education /  
International Conference on Computer-Assisted Instruction 2000



## **Advance Program & Invitation**

**Learning Societies In The New Millennium:  
Creativity, Caring & Commitments**

**November 21 - 24, 2000  
The Grand Hotel, Taipei, Taiwan  
<http://icce2000.nthu.edu.tw>**

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## **Final Program & Abstract Book**

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Creativity, Caring & Commitments**

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## Keynote Speakers



*Professor David Jonassen*

University of Missouri, USA  
[Jonassen@missouri.edu](mailto:Jonassen@missouri.edu)

Using Technologies to Model Student  
 Problem Spaces

10:00-11:00, November 22, Wednesday  
 10F Auditorium



*Professor Ching-chih Chen*

Simmons College, Boston, USA  
[chen@simmons.edu](mailto:chen@simmons.edu)

Millennium eLearning: The Next Killer  
 Application Implications for Educators and  
 Information Professionals

11:20-12:20, November 22, Wednesday  
 10F Auditorium



*Professor Marlene Scardamalia*

University of Toronto, Canada  
[mcardamalia@oise.utoronto.ca](mailto:mcardamalia@oise.utoronto.ca)

Social and Technological Innovations for a  
 Knowledge Society

08:30-09:30, November 23, Thursday  
 10F Auditorium



*Professor John Self*

University of Leeds, UK  
[J.Self@leeds.ac.uk](mailto:J.Self@leeds.ac.uk)

Computer-Based Strategies for Articulate  
 Reflection (and Reflective Articulation)

08:30-09:30, November 24, Friday  
 10F Auditorium

## Computer-Based Strategies for Articulate Reflection (and Reflective Articulation)

*John Self*

In 1993, the last time ICCE was in Taiwan, theories of situated cognition were promising to change the field of educational computing. What has happened since? It seems that many of the superficial interpretations of situated cognition (that thinking is a physical skill, that knowledge cannot be separated from activity, that learning takes place through participation and not in an individual mind) have been sufficiently refined that they may be considered to accord with current emphases on collaborative learning environments. However, the precept that 'situated' means coordination without deliberation", which, superficially (and, of course, situationists would attempt to clarify that it is much deeper than this), seems to reduce cognition to unreflective practice does not appear to correspond to current system designs. There is now an increased emphasis on learning systems providing an environment not just for practice but also for articulation and reflection. The reasons for this will be discussed and some strategies for promoting articulation and reflection will be illustrated with reference to four systems: Euclid (for geometry problem-solving), BLS (for understanding floating and sinking), MARCo (for group planning) and STyLE (for learning terminology).

*Keywords: system design, reflection, articulation*

## Millennium eLearning: The Next Killer Application Implications for Educators and Information Professionals

*Ching-chih Chen*

The rapid technological change in the last decade and the fast proliferation in the use of the Internet and World Wide Web have indeed transformed the way we live, work, communicate and learn. With the shifting market and social conditions, our education systems are challenged with providing increased quality educational opportunities to more people who have not been reachable by traditional educational means. To answer this challenge, technology-based distance education has been introduced. On the other hands, with the introduction of the Next Generation Internet, together with powerful web-based systems and authoring tools, many, including commercial entities, have considered eLearning the next killer application. The playing field of higher education has become more and more crowded and muddy. While potentials for this development are obvious, so are many problems and issues. This speaker intends to describe the millennium eLearning development, particularly in the US, and discuss some of the complex problems and issues facing us. Implications for educators and information professionals will be explored in the hope to stimulate more creative use of technology among these professionals in meeting the needs of the learning societies in this new Millennium.