

# Conference Programme

Saturday 23 June

19.00 **Get Together Party**  
Hotel Victoria  
Address: Itsenäisyydenkatu 1

Sunday 24 June

Registration: open every day, starting at 08.00  
Tampere Hall  
Address: Yliopistonkatu 55

08.45 – 09.00 Opening  
*Seppo Pohjolainen, Tampere University of Technology, Finland*  
09.00 – 09.45 Keynote

## Adaptive Educational Hypermedia

*Peter Brusilovsky, University of Pittsburgh, USA*

09.45 – 10.00 Refreshment Break

## Tools and Supports for Learning

10.00 – 10.30  
1. Information Support for Learners and Teachers in Web-Based Education  
*Lora Aroyo, University of Twente, The Netherlands & Darina Dicheva, Winston-Salem State University, USA*

10.30 – 11.00  
2. IT-supported Knowledge Creation: The Right Tools for Right Use  
*Tommi Tikka, Fortum Service & Sami Hautakangas & Pekka Ranta, Tampere University of Technology, Finland*

11.00 – 11.30  
3. Scaffolds for Web Discussion: Do They Help?  
*Pentti Hietala, University of Tampere, Finland*

11.30 – 12.30 Lunch Break

## Intelligent Tutoring Systems

12.30 – 13.00  
4. VITA: Using PYTHON for Visual Design of Web-based Tutorials  
*Tatiana A. Gavrilova, Saint-Petersburg State Technical University, Russia, Rodolphe Texier, E.N.S.A.E, France & Natalie V. Stash, Saint-Petersburg Electrotechnical University, Russia*

13.00 – 13.30  
5. Is the Domain Expert Module for Expression Manipulation Exercises Ready?  
*Rein Prank & Eno Tõnisson, Tartu University, Estonia*

13.30 – 14.00

6. Client-Server Architecture Based Integrated System for Education at a Distance  
*Kinshuk, Hong Hong, Neena Albi, Massey University, New Zealand, Ashok Patel, De Montfort University, United Kingdom & Chris Jesshope, Massey University, New Zealand*

14.00 – 14.30 Refreshment Break

## Experiences of Using Web in Education

14.30 – 15.00  
7. Experiences on Virtual Problem-Based Learning  
*Tuija Helokunnas & Juha Herrala, Tampere University of Technology, Finland*

15.00 – 15.30  
8. Individual, Society and Technology: Multidisciplinary Computer Supported Collaborative Learning  
*Kirsti Ala-Mutka, Tampere University of Technology & Kari Peltola, University of Tampere, Finland*

15.30 – 16.00  
9. E-Learner in E-Reality  
*Päivi Mäkinen, OPENgate & Pekka Ihanainen, IhaNova Ltd, Finland*

16.00 – 16.15 Refreshment Break

## Future Trends in Educational IT

16.15 – 16.45  
10. Keying into Flexible Systematic Design: Opening the Door to Learning in Online Communities  
*Roxanne Toto, Pennsylvania State University, USA, Friedrich Scheuermann, University of Innsbruck, Austria, & Ken Larsson, Stockholm University/Royal Institute of Technology, Sweden*

16.45 – 17.15  
11. Various Facets of Constructivism in Education for New Information Society  
*Vladimir A. Fomichov, Moscow State Institute of Electronics and Mathematics & Olga S. Fomichova, Moscow Children and Teenagers Palace of Creative Work, Russia*

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Monday 25 June

Registration: open every day, starting at 08.00  
Tampere Hall  
Address: Yliopistonkatu 55

09.00 – 09.45 Keynote

### Machine Learning in Data Mining

*Erkki Oja, Helsinki University of Technology, Finland*

09.45 – 10.00 Refreshment Break

### Information Tools for Education

10.00 – 10.30

12. Bayesian Modeling in an Adaptive On-Line Questionnaire for Education and Educational Research

*Jaakko Kurhila, Miikka Miettinen, Markku Niemivirta, Petri Nokelainen, Tomi Silander & Henry Tirri, University of Helsinki, Finland*

10.30 – 11.00

13. Modeling Students' Views on the Advantages of Web-Based Learning with Bayesian Networks

*Petri Nokelainen, Tomi Silander, Henry Tirri, Anne Nevgi & Kirsi Tirri, University of Helsinki, Finland*

### Real-World Cases and Experiments

11.00 – 11.30

14. A Learning Experiment in Mathematics Using A&O Learning Environment

*Seppo Pohjolainen, Sami Hautakangas, Pekka Ranta, Jarkko Levasma & Katja Pesonen, Tampere University of Technology, Finland*

11.30 – 12.30 Lunch Break

12.30 – 13.00

15. From Theory to Practice: Transfer of Knowledge and Problem Solving Skills Acquisition on Neural Networks

*Safia Belkada & Toshio Okamoto, University of Electro-Communications, Japan*

13.00 – 13.30

16. Supporting Innovation in the Water Industry via ICT Based Learning Systems

*Paola Forcheri, Maria Teresa Molfino & Alfonso Quarati, Istituto per la Matematica Applicata – Consiglio Nazionale delle Ricerche, Italy*

13.30 – 14.00

17. Web-Based Learning Environment Applied to the Instruction of Electric Power Engineering

*Pekka Saari, Heli Hytönen, Johanna Koivisto, Anna Seppänen, Sami Silvennoinen, Sanna Mäenpää & Leena Korpinen, Tampere University of Technology, Finland*

14.00 – 14.30

18. Organization of Learning by Computer Science Projects

*Sarah Pollack & Zahava Scherz, The Weizmann Institute of Science, Israel*

14.30 – 15.00 Refreshment Break

15.00 – 15.30

19. Multimedia-Based Teaching in Signal and Image Processing

*Reiner Creutzburg, Fachhochschule Brandenburg – University of Applied Sciences, Germany & Artur Lugmayr, Tampere University of Technology, Finland*

### Information Technology in Learning

15.30 – 16.00

20. Digital, Interactive TV as Future Platform for Distance Education

*Artur Lugmayr & Reiner Creutzburg, Tampere University of Technology, Finland*

16.00 – 16.30

21. Videolecturing for International Students

*Pekka Nieminen, Lappeenranta University of Technology, Finland*

20.00

### Conference Dinner

Restaurant Alexanderin Palatsi  
Address: Kuninkaankatu 1

**PEG 2001 is sponsored by:**



Tuesday 26 June

Registration: open every day, starting at 08.00  
Tampere Hall  
Address: Yliopistonkatu 55

09.00 – 09.45 Keynote

### Instructional Technology and the Quality of Learning

*Erno Lehtinen, University of Turku, Finland*

09.45 – 10.00 Refreshment Break

### Learning Communities and Cognition

10.00 – 10.30

22. Studying Changes in Learning Environments Brought About by ICT-Based Systems

*Rosa Maria Bottino & Giampaolo Chiappini, Consiglio Nazionale delle Ricerche Istituto per la Matematica Applicata, Italy*

10.30 – 11.00

23. Learning in Virtual Communities – The Paderborn Approach to Cooperative Learning

*Thorsten Hampel & Reinhard Keil-Slawik, University of Paderborn, Germany*

11.00 – 11.30

24. Building Simulations to Develop Complex Skills

*Rob Wright & Barry Harper, University of Wollongong, Australia*

11.30 – 12.30 Lunch Break

### Computer Supported Collaborative Learning

12.30 – 13.00

25. The Solver Learning Environment for Solving Mathematical Word-Problems – How to Support Reflectivity?

*Heli Ruokamo, University of Lapland, Finland*

13.00 – 13.30

26. Design for Collaboration: Enabling Cooperative Work among Children

*M. Cecilia C. Baranauskas & Gianfrancesca C. Barcellos, State University of Campinas UNICAMP, Brazil*

### New Pedagogical Models for Learning Environments

13.30 – 14.00

27. Supporting Mrs Jones, the Concept Mapper  
*Tom Conlon, University of Edinburgh, Scotland*

14.00 – 14.30

28. The Virtual Shopping Mall: Recasting Computer Game Protocols as Supports for Learning  
*Annamarie Jagose & Somaiya Naidu, University of Melbourne, Australia & Lee Wallace, The University of Auckland, New Zealand*

14.30 – 15.00 Refreshment Break

### Examples of Using Information and Communication Technology in Education

15.00 – 15.30

29. Supporting Students and Tutors in Web-Based Virtual Seminars. Suggestions to Improve Small-Group Teaching

*Anne Jelfs & Chris Colbourn, University College Northampton, UK*

15.30 – 16.00

30. Knowledge Transformation through ICT in Science Education

*Linda Baggott la Velle, Angela McFarlane & Richard Brawn, University of Bristol, UK*

16.00 – 16.30

31. Hyperlink: A Generic Tool for Exploratory and Expressive Teaching and Learning

*Jon Nichol, Kate Watson, University of Exeter, UK, Kevin O'Connell, Derek Brough, Imperial College, UK & Linda Baggott la Velle, University of Bristol, UK*

16.30 – 16.45 Closing

*Seppo Pohjolainen, Tampere University of Technology, Finland*

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23<sup>rd</sup> – 26<sup>th</sup> June 2001 • TAMPERE – FINLAND



# Intelligent Computer and Communications Technology – Learning in On-Line Communities

THE TENTH INTERNATIONAL PEG CONFERENCE

**PEG2001.tut.fi**

**Organised by:**

**PEG 2001 23rd – 26th June 2001  
Tampere Hall  
Yliopistonkatu 55, TAMPERE, Finland  
[www.tampere.fi/tampere-talo/](http://www.tampere.fi/tampere-talo/)  
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