

AROUND THE GLOBE

Steve Wheeler

University of Plymouth, UK

This regular column offers reviews of world-wide distance learning developments. It provides reports of international conferences and workshops, news of innovations in technology, and reviews of events, people and institutions connected with open and distance learning practice and theory. The world is a big place, and the success of this column will depend upon your input, wherever in the world you may be reading this journal. Your news, conference reports and reviews of international events will be considered for inclusion in future issues of this journal. Please e-mail your contributions to: swheeler@plymouth.ac.uk

***Conference Report: The World
Conference on Computers in
Education—Copenhagen, Denmark.
July 30-August 3, 2001***

Wonderful, wonderful Copenhagen, capital city of Denmark and home to the Little Mermaid, Danish pastries, blue cheese, canals and a multitude of bicycles, was the host of the 7th IFIP World Conference on Computers in Education. For one week in the summer of 2001, this one-time haunt of the author Hans Christian Andersen became the gathering place for

educational computing specialists from around the world. The conference was held in the recently constructed Bella Center, a purpose-built exhibition complex situated on the outskirts of the city. So new was the venue, in fact, that delegates had to be transported in from the city by public transport, as there were no hotels nearby to the hall—they have yet to be built. This was one of the few logistical problems we had to overcome during the weeklong event. However, this was not such a chore, for on most days the sun shone and temperatures averaged 75 degrees Fahrenheit. The conference was organised under the auspices of IFIP (the International Federation of Information Processing), a UNESCO-sponsored international professional organisation. Individuals interested in joining the organisation are invited to check out the IFIP website at the end of this column. In this report I shall try to present a flavour of the whole conference by selecting a few of the more notable contributions to review.

The Opening Session

The conference was opened by the President of IFIP, Peter Bollerslev, accompanied in

• **Steve Wheeler**, Graduate School of Arts and Education, Faculty of Education, University of Plymouth, Douglas Avenue, Exmouth, EX8 2AT, United Kingdom. E-mail: swheeler@plymouth.ac.uk

rather surreal fashion by three Scottish bagpipers. He informed the 1200 delegates assembled from 60 countries that they could expect over 200 papers to be presented during the week. Bollerley then welcomed the Danish Minister for Education, Margrethe Vestager onto the platform, who welcomed delegates on behalf of the Danish government. Next to address the conference was the Deputy Assistant Director General for UNESCO, Aicha Bah Diallo, who inspired delegates with a vision for education for all, through the use of distributed technologies and distance education. As Vestager had earlier stated, the future of education will be reliant upon the key elements of shared knowledge, networking and collaboration. The world, said Madame Diallo, was now ready for this approach. A perfect exemplar was later in the same day presented during the Imfundo project seminar.

Rwanda, Africa: Teacher Education and the Imfundo Project

The central African republic of Rwanda is now emerging from its war torn years and is beginning to seek ways to rebuild itself as a nation. One of the key presentations of the WCCE2001 conference highlighted the work achieved by the Imfundo project and its transformation of the educational system in Rwanda. One of the key aims of the project is the educate at least 500 primary school teachers each year in the 10 educational centers opened by the funding. Training for the teachers will last one year, but because there is a genuine need to keep teachers near to the schools (there is such a shortage of teachers), there are plans to deliver this training via the Internet. Prior to Imfundo, teachers in Rwanda received only five days formalised training.

Australia: Agent Technologies

Carolyn Dowling, from the Australian Catholic University, a member of the 90-strong Australian delegation, gave a fascinating paper presentation on agent technologies and the

electronic classroom. Her main focus was a discussion on the difference between human teachers and computer agents. She showed that after the teacher and the student, the third element in the social construction of knowledge is the computer software. Dowling argued that computer agents have been designed to emulate the tutor as an instructor, and suggested that future developments should reflect the attributes of the learner. Dowling concluded her presentation by posing some important questions. For example, can we design computer agents that can “learn” in the same manner that humans can, and would they be able to develop their own “personalities”—sense of style, diction and tone of voice that are as responsive to student needs as human teachers are? Are computer agents able to substitute for human teachers, and are they able to offer an added value to the traditional role of teachers?

Australia: Social Presence in Online Learning

Another Australian academic, Elizabeth Stacey, from Deakin University, provided the conference with a stirring presentation about social presence in online learning environments. Stacey argued that social presence is not about facial expressions, gestures and tone of voice, but rather about overcoming the difficulties presented by the absence of these communication facets when communicating electronically. Stacey defined social presence as “the degree to which participants project themselves effectively within a particular medium.” Research has shown that the better the social presence, the more effective the learning outcomes will be, and students will generally participate in more social activities, sharing more cognitive content between members of the group. Motivation is increased, she argued, causing students to adopt greater responsibility and accountability towards each other. The teacher’s role in the process, she concluded, is to encourage students to concentrate on creating social presence, through a range of exercises such as self-disclosure

through writing about oneself and one's family.

Denmark: Communities of Practice

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Aalborg University's Håkon Tolsby presented a paper on how to design virtual environments for communities of practice. Drawing upon Wenger's theory of Communities of Practice (1999) Tolsby showed how virtual environments can be extremely isolating and not the best settings within which to foster collaborative learning. A way to avoid this pitfall, argued Tolsby, would be to encourage shared repertoires between participants, where negotiated meaning is a central component. Tolsby espouses the use of the shared portfolio as the most effective tool for participative activities in virtual environments, ensuring that students have the best opportunities to negotiate meaning and share ideas across electronic communication systems.

United States and Japan: A Remote Collaboration in Real Time

It was 17.00 hours local time in Copenhagen, 10.00 in Kentucky, USA, and midnight in Toyama, Japan when the event started. Tom Lough of Murray State University, Kentucky, allowed students in the United States and Japan to take control of local software, screens, and telemetry to help each other to move radio-controlled Lego around a maze. One commentator suggested that this was like watching NASA control vehicles on Mars—the same principles were involved, but the young students who controlled the robots used simple PC computers, Lego toys, and software that is freely downloadable from the Internet. This demonstration of application sharing, video conferencing and remote control of equipment has strong implications for tele-learning and in particular remote real time control of surgical instruments. Medicine may never be the same again!

Other papers, panel discussions, and demonstrations throughout the conference were as

diverse as the countries the delegates represented. Papers covered various aspects of school and university-based computer use, including technical, organisational, pedagogical, social, economic, and psychological considerations. However, at the heart of most papers was the central concern of how to improve the learning experiences for children and adults using information and communications technologies. Distance education was well represented, with at least four themed paper and topic sessions dedicated to its research, theory and practice.

The Keynote Presentations

A total of eight keynote presentations ensured that there was something for everyone who attended the Copenhagen conference. On the final day, an inspirational presentation by Scott Welsh, the chief evangelist for Centrinity, left the delegates wondering about the arguments for more bandwidth. Welsh argued that bandwidth is not the essential problem—software is the answer to the bottleneck problems most of us experience when trying to communicate over the Internet. Welsh demonstrated the next generation of First Class conferencing software and stunned the audience by showing rapid real-time communication on normal bandwidth between Copenhagen and the United States. Welsh concluded by outlining his vision for online learning in the future—driven by high-quality, high-speed software solutions.

On the Thursday of the conference, Hans Appel, Chief Technology Officer of Sun Microsystems, gave a keynote presentation on the power of knowledge, with the intriguing subtitle of "The Disappearing Internet." His real intention by using this title was to demonstrate that the tools we currently use for communication and information are rapidly going to become more invisible. Computers, claimed Appel, are going to become more ubiquitous, but less apparent. In the same way the telephone has penetrated our psyche, we will be able to use the computer and the Internet with-

out thinking about them, and without knowing how the software really works. Appel also made a prediction that the Web will soon be split into six separate interconnected webs. These will be the pocket communicator web, the entertainment web, the e-business web, the voice activated web, the pervasive computing web and the "traditional" web. The personal web will be used for connecting mobile phones and PDAs, and will be completely portable. The entertainment web will be used for video gaming, story telling, and other on-demand entertainment. The e-business web will form the backbone for consumers and businesses in the market place. The voice-activated web will understand what we are saying and respond in an intelligent way to our needs. The pervasive computing web will be a web of machines communicating to each other so that our demands are met speedily. Hans Appel concluded by predicting that we will be preparing our children for a world of work in which each employee is an entrepreneur in a networked worldwide community. It will be a society where the power of human imagination and knowledge or intellectual capital will be crucial for the constant development of society and the individual.

Mike Couzins, Managing Director for Corporate Communications and Training at Cisco, brought his own particular vision to the conference. He asked us to imagine 200,000 students attending one learning session. This is what the Cisco Networking Academy program is delivering every day, in over 6,700 educational institutions worldwide. Cisco provides continual updates via the Internet, to meet the most demanding training requirements of today's computer industry.

Final Thoughts

The 7th world Conference on Computers in Education was extremely successful for a number of reasons. Throughout the event, delegates were continually kept apprised of the times and venues for the many papers and seminars, last-minute changes in the program, spe-

cial events and social program, special demonstrations, workshops and professional group meetings through a free daily news bulletin supplied by the local organising committee. Several of the IFIP technical committee working groups, including 3.6 (Distance Education) met for their annual general meetings throughout the weeklong conference. A cyber café supplied by Sun Microsystems enabled delegates to keep in touch with events at home and abroad. Throughout, the conference was organised well, and delegates were generally very happy. If there is one complaint, it is the same complaint that can be justifiably levelled at all large conferences. There is never enough time to see everything, or attend every session one wishes to see.

Copenhagen will be remembered for its warm welcome, even warmer sunshine, and spectacular harborside views. Old Copenhagen was a great experience, the Tivoli Gardens were a wonderful sight when lit up at night, and for those who had the time to stroll during the few hours of free time, the Royal Palace and other ancient buildings were a pleasant diversion. The reception in the city's town hall on the first evening, where the mayor greeted us all in faultless English, was a great time for delegates to get to know each other and sample the culinary delights of Denmark. Delegates were sent away enthused and motivated - with the prospect of returning for the next WCCE conference in Cape Town, South Africa in 2004. Some delegates are probably already saving up for the trip!

Useful IFIP Websites

- Information Technology for our Times: Ideas, Research and Application in an Inclusive World: Montreal, Canada, 25-30 August 2002. <http://www.wcc2002.org>
- Website for IFIP Working Group 3.6 on Distance Education <http://education.deakin.edu.au/ifipwg3.6/Default.htm>
- IFIP main website: <http://www.ifip.or.at>