Editorial

BETTY COLLIS

Faculty of Educational Science & Technology, University of Twente,
P.O. Box 217, 7500 AE Enschede, The Netherlands.
E-mail: collis@edte.utwente.nl

BRIAN SAMWAYS

ISS Training Centre, Martineau Education Centre, Balden Road,
Harborne, Birmingham, B32 2EH, UK.
E-mail: bsamways@lea.birmingham.gov.uk

This issue inaugurates a new professional journal in the rapidly growing area of education and information technologies. Why a new journal? What is its history, domain and goal? What distinguishes this journal from the many others relating to its subject area?

The answers to these questions all relate to the relationship of this journal to the international professional society called IFIP (International Federation for Information Processing) and its Technical Committee on Education (called TC3). IFIP TC3 is a long-established association of representatives of national computing societies throughout the world in leadership positions with respect to educational applications of computers in their countries. Through six different 'working groups', IFIP brings together professionals in many different domains of education: in teacher education, in curriculum and instruction for elementary and secondary education, in administration and policy making, in computer science education at the secondary and higher education levels, in research, and in the application domain of distance education. IFIP, more than any other professional association, brings together professionals at all levels of education, from teacher to educational software developer, from national policy maker to informatics instructor, in a collegial interactive relationship. Membership in IFIP working groups is restricted; only those meeting high standards of experience and professionalism as well as having an international orientation can meet the various qualification requirements.

While the broad spectrum of highly experienced educational representation is one major characteristic of IFIP TC3, its second characteristic is its internationalism. IFIP is not a national association of any one country making provision for some international membership; IFIP is international in its every aspect. Those in IFIP

are keenly aware of the value of learning from the experience of colleagues in other countries and cultures; of not seeing the world through the optic of any one setting or orientation; of respecting the options chosen by others; and of continually being struck by the universality of key educational issues and insights, even while making note of the differences in approaches within cultures and systems.

Throughout its history, IFIP TC3 has stimulated the exchange of ideas and experiences throughout its own membership and throughout the larger educational community through the familiar strategies of regular congresses and conferences and through the production of high quality books and briefing documents for international agencies and commissions. But IFIP TC3 has not had the outlet of its own professional journal until now.

Given the stimulation of the publishers Chapman & Hall, in their second year of being the official publishers of all IFIP books and proceedings, the journal *Education and Information Technologies* has been launched. Similar to its parent body IFIP TC3, the journal is fully international in its orientation and broad in its scope. The common denominator of interest in the journal, as in IFIP TC3 itself, is the application of information technologies in educational practice.

But the definition of information technology is also an interesting aspect of IFIP TC3's history. In its earlier days, IFIP TC3 largely defined its domain in terms of informatics and the teaching of informatics. Over the ensuing decades, informatics came to include information technologies. In the 1990s, this domain has again widened, to include communication technologies. Thus the journal will reflect this enlargement of the domain, just as the field reflects it.

Finally, just as it is affecting educational practice throughout the world, information technology is affecting the nature of information dissemination itself. This is a final aspect of the journal *Education and Information Technologies*: the journal will not only be in paper form but will also develop an Internet available variant. The optimal design of this parallel electronic version of the journal is still to emerge, and experimentation towards its best deployment will be part of the energy of the new journal.

Thus, why a new journal? Due to the opportunity to reflect international developments in the application of information technologies in education, through the framework of IFIP TC3 and Chapman & Hall publishers, and motivated by the new opportunities in international dissemination emerging through the Internet that can supplement and complement the print journal in new and interesting ways. After a highly successful international conference, in July 1995 in Birmingham, it became clear that a mandate exists for IFIP TC3 to extend its professional service to a broader audience than its congresses and working conferences. And thus the history, the domain, the goals and the distinguishing features of the new journal are all related to those of IFIP TC3.

The articles in this first issue of *Education and Information Technologies* are directly reflective of the broad range of IFIP TC3's professional domain. The articles relate

to applications of information technology from the micro-level, in terms of specific software applications and environments, to the macro-level, in terms of national implementations and experience. They describe applications relating to elementary school, secondary school and higher education. They reflect the perspectives of decision makers and administrators in the school sector, as well as software designers and researchers. While such a mix may seem overly ambitious, it is, in fact, no larger than the field and the technology under examination.

More specifically, what about the five articles in this first issue of *Education and Information Technologies*? The following listing shows the articles, their country of origin, a brief note about their content, and an indication of the relationship of the article to the various working groups of IFIP TC3:

- (1) Hepp, P., Laval, E., Moënné, G. and Ripoll, M. *Monitoring the 'Enlaces' educational computer network*, Chile.

Following a description of a national educational network in Chile, its support, and services, the article focuses on measures of its use and impact in Chilean schools and in connecting those schools to each other, to the Ministry of Education and to faculties of education.

This article relates to all six of the IFIP TC3 working groups, in that there is a research focus as well as an administrative application (WG 3.3 and 3.4), all three educational sectors are involved in the Network (elementary, secondary and higher education, thus WG 3.5, WG 3.1 and WG 3.2), and also distance delivery is a core aspect (WG 3.6). The technologies involved are the Internet, and specialized interface software.

- (2) Ellis, A., Debreceeny, R. and Crago, R. *Audiographics in transition: changing technologies and patterns of usage*, Australia.

A particular audiographics software package has been in evolution in Australia since 1990, and has been employed in more than a 1000 educational settings ranging from primary school to university. This article integrates the technical evolution of the package and its carrier technology with the increasing range of educational applications in which the package is being employed.

The article, like that of Hepp and his colleagues, ranges across the domains of all of the IFIP TC3 working groups.

- (3) Wright, P. W. *Use of site-based microcomputers for instructional support: the multi-year experience*, Canada.

While the previous articles related to national experiences, Wright's focus is administrative applications of information technology in one of Canada's largest school districts over a six-year period. The technologies involved are software-hardware systems.

The article relates most directly to IFIP TC3 WG 3.4 in its focus on student information management systems (SIMS), but is also of interest to WG 3.1 (secondary school) and WG 3.4 (research).

- (4) Mendes, A. J. and Mendes, T. *AIDA: a methodology independent support tool for educational software authoring*, Portugal.

While Wright's study considered the impact of SIMS as a type of software on educational practice within a school district, Mendes and Mendes focus more specifically on software itself, or more specifically, on a new authoring environment for teacher-developed software applications.

This article relates most closely to WG 3.3 (research) in its interest in a generic development environment, but the applications of the environment are relevant to all levels of education [thus WG 3.1 (secondary), WG 3.2 (higher education) and WG 3.5 (elementary)].

- (5) McManus, M. M. and Aiken, R. M. *Teaching collaborative skills with a group leader computer tutor*, USA.

As with Mendes and Mendes, McManus and Aiken focus on a particular software environment, but instead of it being an authoring environment, it is a sophisticated 'intelligent tutor' for the stimulation and support of group collaborative activities.

With its immediate application area within university level computer science, this article has direct relevance to IFIP WG 3.2 (higher education), as well as its more generic base in WG 3.3 (research).

Thus, this issue comprises a broad range of articles, each written by specialists with international reputations and experience. This is typical of IFIP TC3; this will be typical of *Education and Information Technologies*.