
E-TRAINING PRACTICES FOR PROFESSIONAL ORGANIZATIONS

IFIP – The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

E-TRAINING PRACTICES FOR PROFESSIONAL ORGANIZATIONS

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Preface

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IFIP Working groups 3.3 (Research on Education Applications of Information Technologies) and 3.4. (IT-Professional and Vocational Education in Information Technology) organized an open conference on ‘E-training Practices for Professional Organizations’ between July 7-11, 2003 in the famous jazz city of Pori, Finland. The general topic and themes of the conference were decided about three years before the conference. At that time, the year 2000, we were still living in ‘the hype time of ICT use’ in many countries. However, the first signs of change were already there; the burst of the ‘hype bubble’ was awaiting us.

We were interested in examining the opportunities, experiences and working ideas in the domain of electronic learning and training, especially for professional organizations. We had witnessed many e-learning and multimedia systems in organizations, but they have been somewhat isolated from the organisational context. It seemed that we needed to address not only the potential of technology, but also the limitations (or opportunities) of organisational strategies and processes. We can now say that we were right,

although many of the e-learning technology companies are now in financial trouble, the tendency seems towards an integration of e-business, e-work and e-learning processes. How to successfully combine learning, working, and managing is the key issue for the future. The master of these processes needs to be aware of technology opportunities, guidelines of emerging organizations and the transformation potential of people. This demands new qualities for development.

Our conference keynotes reflect the multifaceted nature of e-training efforts. Riitta Vänskä from Nokia Corporation, Finland, responsible for creating the basics of Nokia's e-learning for internal competence development, raised a new important concept she called 'n-learning'. Although this sounds like a new 'buzz letter' for this business, it involves an important rationale. N-learning i.e., network learning, is the emerging issue in organisational learning. When talking about communities of practice, network economy and inter-organisational learning, we need to face the challenges of learning systems supporting the aforementioned. Learning in a network is both formal and informal. Informal learning needs to be context-aware learning—you might not have the time or place to find your formal learning system. Nokia has explored many mobile or wireless work and learning systems. They are interested in seeing whether work and learning processes can be fostered with mobile technologies.

Director and Professor Jarmo Viteli from the eTampere Development Program raised many examples of the development of a knowledge society, of which Finland has been famous worldwide. Based on the eEurope initiative, the city of Tampere has invested in developing the Tampere area as the spearhead city of Finland's knowledge society developments. He commented that Tampere area companies had produced many innovations, such as the first analogue and digital mobile phone calls (1974, 1991), the bioresorbable implant, and a walking forest harvester (1984, 1995). Lately more 'smiling' innovations have appeared, such as world's first Internet-bus and—of course when in Finland—an Internet-connected sauna. This has provided the basis for serious investment in the research and development of e-learning issues.

This is also related to our discussion on contexts; at the level of knowledge society development, it is difficult to test or exercise any innovations if you do not have a large commitment to do society-wide. or at least regional, development. The Larger Tampere area aims at to be a living laboratory of this development and to raise important issues in that field.

Carolyn Dowling, professor and Head of the School of Business and Informatics at Australian Catholic University, continued this discussion by arguing that it is also important to situate learning within the type of co-operative and collaborative problem-solving environment characteristic of

most contemporary workplaces. Context is everything but it is very challenging to manage. We need to be sensitive when designing interactivity and social learning into our systems.

Some people might not like the intrusive and ubiquitous nature of learning systems. Technologies change fast, but people often do not. Carolyn Dowling pinpointed that we can exploit pedagogical agents for improving learning. At the end, handheld communications devices and agent technologies may enhance our ability to deliver education and training with maximum flexibility, and in an interactive social context.

The cultural-cognitive impact of e-training development was delivered by Professor Mohan Gurubatham from the International Business School of the University of Technology, Kuala Lumpur. His talk delved into the origins of knowledge creation in a cultural context. Cultural issues, whether national or organisational ones, affect the process of learning and systems implementation. Professor Gurubatham wanted to shift from technology-oriented studies to more ‘mind-bias’ or consciousness studies. Technology provides a learning platform, but the real potential is in developing people’s conceptual richness and higher-level cognitive skills. Involvement and interactivity together provides new avenues for development such as mobile environments or digital TV applications. At the end, these applications and systems need to be fitted into the cultural context. The basic message was that you cannot change culture, but you can learn it, accept it, and exploit it.

Etrain 2003 was also a forum for the 40th birthday celebration of IFIP’s Technical Committee 3. We were happy to host this event and proudly provide avenues for the next 40 years work. The papers, workshops and demonstrations presented in the conference reflected many of the challenging areas we need to address. Papers stressing the need to address theoretical and paradigmatic awareness in addition to technology are very important to align business, working and learning processes. In those papers constructivist, social learning, and situated learning were highlighted and also empirically shown. This implies the need to have more context-driven e-training development. Learning results might be superficial if the training processes do not address expertise development, just cognitive level evaluation.

Many company examples verified our assumptions and were pinpointing, for example, interactive, network-based and competence-driven approaches. Industry people are also active in driving their own professional profiles for developing competence definitions. Our conference also offered a forum to exchange ideas in that sector. Many of the design issues are important both in technology side and curriculum side. It seems that technology is always one step ahead and the problem is how to boost sound implementation of

those technologies. Technology changes fast but people not. Inter-organisational arrangements and collaboration with industries were topics under new forms of training and learning. Networked economy provides a platform for that if you can agree on rules and commitments between key actors of that collaboration.

In summary, in the future we will need a balanced view of “e-thinking”. It means integration of e-business, e-work and e-learning domains. Without strategy and organizational objectives you might miss your focus of e-training. Organizations are not able to fund projects without focus. Work processes are the context into e-work practices need to be fitted. We need to be aware that radical views on sociology of work and “over-liberation” of workers might lead us to confrontations that lose the target of organizational development. Also e-learning might get lost by over-emphasizing traditional “class-room pedagogy” and only cognitive level results. Organisational learning in many domains needs to be addressed, and there is much work to be done to integrate processes for individual, group, organizational and even inter-organisational learning.

We are very grateful to our supporters; the European Union IST programme, The City of Pori, the Foundation for Economic Education, several companies (Lännen Puhelin Oy, Satakunnan Puhelin Oy, Elinar Oy Ltd, Itecon Oy) and organizations such as Pori Jazz Association. We are grateful to all voluntary members of the International Program Committee of Etrain 2003, the personnel of Tampere University of Technology in the Pori Unit and all of our IFIP/TC3 related colleagues who made this conference a success. We will remember Pori and the E-train will continue its ride to the next stop!

We are happy to provide this volume of contributions to our readers and hope that this collection of research and development efforts will show the way for further events in IFIP TC3 activities!

The original version of this book was revised.

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