

Information Technology in Educational Management for the Schools of the Future

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.

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Information Technology in Educational Management for the Schools of the Future

IFIP TC3/ WG 3.4 International Conference on Information Technology in Educational Management (ITEM), 22–26 July 1996, Hong Kong

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SPRINGER-SCIENCE+BUSINESS MEDIA, B.V.

First edition 1997

© 1997 Springer Science+Business Media Dordrecht
Originally published by Chapman & Hall in 1997

ISBN 978-1-4757-5497-1 ISBN 978-0-387-35090-5 (eBook)
DOI 10.1007/978-0-387-35090-5

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A catalogue record for this book is available from the British Library



Printed on permanent acid-free text paper, manufactured in accordance with ANSI/NISO Z39.48-1992 and ANSI/NISO Z39.48-1984 (Permanence of Paper).

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PREFACE

This book is for both specialist and generalist. For Information Technology (IT) and Educational Management (EM) researchers, it brings together the latest information and analysis of ITEM projects in eleven countries. But the issues raised by this collection of papers are so important for schools, school systems and the future of education that it is essential reading not only for researchers but also for teachers, administrators and all concerned with the planning and governance of our education systems.

New technologies may improve our lives in two ways: by enabling us to do things better (accomplishing what we do already more efficiently) and by enabling us to do better things (accomplishing new things that we were not able to do before).

Sometimes “doing things better” merges into “doing better things”. Thus in the 19th century the coming of the railway enabled our forbears to accomplish their existing journeys in less time and in greater comfort. But it also opened up the prospect of new journeys to more distant places, and led ultimately to far-reaching changes in lifestyles in new, commuter settlements far from the old city centres.

So it is in the present day with Information Technology in Educational Management. Some of the papers in this volume focus on specialist tasks, for example how to develop a computer-based decision-support system to help those drawing up school timetables. Others address situations in which the power of the technology offers us the potential to change radically what we do.

The papers in this volume have been selected from those presented at the second International Working Conference on ITEM, held in Hong Kong in July 1996. Participation in the Conference was by invitation only, to leaders in the ITEM field from around the world.

The first International Working Conference on ITEM, held two years previously in Israel, was aware that “a massive and rapid computerisation process in schools, school districts, and throughout the other levels of the educational system” was then going on. Delegates were well aware that successful implementation of ITEM depends not only on hardware, but also on adequate software - mainly Management Information Systems (MIS)/Decision Support Systems (DSS) - and on human factors.

Two years later the context has moved on, but similar issues are still with us. Thus in the abstract of his paper, Matti Mäkelä states: “Information Technology will cause continuous changes in our technology environment. The general impression is that the digital age will improve our lives and societies. Huge national strategies and programmes are underpinned by this belief. They do not properly take into account the human dimension.”

The main theme of the second Conference on ITEM caused us to focus on the

schools of the future. What do schools and education systems of the future have to face in the wave of information and communication technology? What is the current state of the art, and experience that can be shared from different places on the globe? What can we learn from research about ITEM? What are the cultural, organisational, managerial, and technological issues needing to be addressed? These questions are answered, in this volume, from the different perspectives of researchers, administrators, and teachers themselves. This second Conference on ITEM, from which these papers are drawn, was sponsored by the Technology Committee on Computers in Education of the International Federation for Information Processing (IFIP), by the Education Department of the Hong Kong Government, and by the School Administration and Management Systems (SAMS) Training and Research Unit of the Hong Kong Baptist University. Thanks are also due to the members of the International Programme Committee and of the Organising Committee of the Conference, and to all who participated in the role of presenters, chairs or delegates.

Through this book, selected papers from this Conference are brought to a wider readership. In these pages you will find pointers to the identification of what are the really significant issues for the schools of the future. You will find also a wealth of information which will help to realise the potential of information technology for the benefit of pupils and teachers in the years to come.

The Editors.