



# NEW TECHNOLOGIES IN EDUCATION

Information and Communications Technologies and their Impact on Education

December 10, 1982

UNESCO  
National  
Commissions  
of the  
European  
Region

Joint  
Studies  
in the  
Field of  
Education

## A Descriptive Overview of the Multi-National Study "NEW TECHNOLOGIES IN EDUCATION"

Participating  
National  
Commissions:

Austria  
Belgium  
Canada  
Denmark  
Finland  
France  
Hungary  
Israel  
Italy  
Spain  
Sweden  
Ukrainian SSR  
USSR  
United Kingdom  
USA

### PURPOSES OF THE STUDY

The study is designed to:

- o Develop a comprehensive inquiry into the applications of technology in education through a cooperative exchange of research and experience-based information among the member countries of the UNESCO European Region;
- o Make available to educational researchers, planners, decision-makers, and other interested parties a description of the new information and communications technologies from the point of view of their potential and actual applications to a broad variety of formal and non-formal educational needs;
- o Provide a discussion of the social implications of the introduction of new technologies in education; and
- o Identify areas in which further development, research and evaluation are most needed on national, regional and international levels.

## PARTICIPATING COUNTRIES

Austria, Belgium, Canada, Denmark, Finland, France, Hungary, Israel, Italy, Spain, Sweden, Ukrainian SSR, Union of Soviet Socialist Republics, United Kingdom, United States

## BACKGROUND

In June 1980, the Third Conference of Ministers of Education of Member States of the European Region of UNESCO, meeting in Sofia, adopted a recommendation requesting member states to conduct joint studies of a comparative nature on well-defined areas of common interest in the field of education. Further discussions at the Eighth Regional Conference of National Commissions of the European Region (Madrid, May 1981), preliminary work by representatives from six European National Commissions, and a meeting of experts in the field of education from 27 countries (Vienna, March-April 1982) led to the establishment of a series of joint studies on a broad range of topics in education. This is one of those studies.

## DURATION

The study was begun in October 1982, and will continue for three years.

## CONTENT AND FORMAT

The study will concentrate on issues related to current and planned applications of new technologies to education, rather than speculate about possibilities for the more distant future.

Particular attention will be paid to the most recent technological developments to the degree to which they are applied by the particular countries: computers, videotex/teletext, interactive video (including videodisc), communications satellites, multichannel cable/fibre optics, teleconferencing (audio/video/computer), as well as new developments in video, audio, and audiographics.

Older technologies will be referred to in the study only as they relate to the new technologies and for the lessons that may now be learned from past experiences.

The working language of the group is English. The final report will be written in a style to make it understandable to a wide range of interested readers.

The content of the final report will be based on:

- (a) A discussion of actual and potential applications of technology to education at all formal and non-formal educational levels, from early childhood through adult and continuing education, in each of the participating countries.

- (b) An examination of the new technologies from the point of view of their usefulness in improving the effectiveness and efficiency of conventional educational institutions, or in introducing new curricula within those institutions, or in extending the range of available services.
- (c) Cases where technology is used in entirely new educational approaches or in new educational delivery modes (these may or may not bypass existing systems).
- (d) A comprehensive review of pertinent literature, including journals, reports and books, published in the participating countries.

## WORK PLAN

### Phase I

During the first year of the study, country-by-country reviews of current and planned applications of new technologies in education will be prepared. These national reviews will be written and edited according to an agreed-upon framework, under the auspices of the national coordinators. Each of the national reviews should include a description of the organization of education and its support structures within the country, and of the prevailing philosophical or theoretical framework within which the role of technology in education is discussed.

Applications of new technologies will be examined, when appropriate, against an analysis and overall assessment of the developments in the use of educational media, including educational radio and television.

Innovative educational ventures using either old or new technologies will be included if they are aimed at meeting newly emerging social demands or at realizing hitherto unfulfilled social goals.

### Phase II

During the second and third year, three types of documents will be prepared. These include:

- (a) Reviews of the state of the art for selected technologies. They will be written from a global perspective by prominent specialists from particular countries, upon recommendation by the national coordinators.
- (b) Case descriptions depicting significant educational applications in participating countries. The descriptions should include the context, goals, organization, financing and evaluation of each case.
- (c) Articles by distinguished educators, sociologists, psychologists, philosophers, technologists, and others suggested by the national coordinators. These articles will identify and

discuss the significant issues involved in applying technology to education. Possible topics include learning theory, the quality of education, access to education, the role of the teacher, organization of education, financing of education, issues related to privacy and freedom, the interfaces between school and working life, school and home, education and state, education and society in general, and others.

In addition, it is expected that a bibliography of the most important literature published in each country on the subject will be created and the journals where future developments are most likely to be reported will be identified.

The U.S. Coordinator, in cooperation with the Canadian Coordinator, will have the overall responsibility for the preparation and the editing of the final report for publication.

#### SCHEDULE OF MEETINGS

The study team will meet at least four times to review the work completed, develop the scope of the next stage of the study, attend briefings on and demonstrations of significant work being done in educational technology in the host country, and to obtain information about other relevant studies. The first meeting was held at the University of South Carolina, Columbia, South Carolina, October 25-28, 1982.

Further meetings are planned for:

1983: October 18-23; Paris, France  
1984: Spring; Klagenfurt, Austria  
1985 Fall; Toronto, Canada

#### UNITED STATES PARTICIPATION

The organizational participant representing the United States is the United States National Commission for UNESCO, an advisory body to the Federal Government on matters dealing with UNESCO. The Commission, which was created by Congress and whose members are appointed by the Secretary of State, is working collaboratively with the U.S. Department of Education.

NATIONAL STUDY COORDINATORSAustria

Professor Dr. Adolf Melezinek  
 Head, Inst. für Unterrichtstechnologie  
 Mediendidaktik und Ingenieurpädagogik  
 der österr. Universitäten (IUI)  
 Univ. für Bildungswiss.  
 Klagenfurt

Belgium

To be announced

Canada

Dr. Ignacy Waniewicz, Director  
 Office of Development Research  
 TVOntario  
 Toronto, Ontario

Denmark

Mr. Ernst Goldschmidt, Chairman  
 c/o Werner Rasmussen  
 Director (international cooperation on  
 information and development)  
 Ministry of Education  
 Copenhagen

Finland

Professor Jukka Lehtinen  
 Faculty of Education  
 University of Tampere  
 Tampere

France

M. Daniel Gras  
 Mission des Techniques Nouvelles de  
 l'Innovation Pédagogique, et de la  
 Formation  
 Ministère de l'Education nationale  
 Paris

Hungary

Mr. Peter Gonda, Head  
 Department of International Rela-  
 tions and Information  
 National Centre for Educational  
 Technology  
 Budapest

Israel

Professor Shlomo Kugelmass  
 Chief Scientist  
 Ministry of Education  
 Jerusalem

Italy

To be announced

Spain

Sr. Ignacio Iturrino Albéniz  
 Director of Education  
 Fundación para el Desarrollo de  
 la Función Social de las  
 Comunicaciones (FUNDESCO)  
 Madrid

Sweden

Dr. Anita Kollerbaur  
 Department of Information Proces-  
 sing and Computer Science  
 University of Stockholm  
 Stockholm

Ukrainian SSR

Dr. Igor Serediuk, Recteur  
 Institut de l'Art Appliqué et  
 Decoratif  
 Rue Gontcharova 38  
 Lvov

Union of Soviet Socialist Republics

Mr. Valentin M. Kouznetsov  
 Vice Director  
 National Research Institute for Higher  
 Education  
 Moscow

United States

Dr. Lawrence P. Grayson  
 Institute Advisor for Mathematics,  
 Science and Technology  
 National Institute of Education  
 Washington, D.C.

United Kingdom

Dr. Glyn O. Phillips  
 Executive Principal  
 The North East Wales Institute of  
 Higher Education  
 Clwyd, Wales

INTERNATIONAL COORDINATORS

Dr. Ignacy Waniewicz  
 Canada (year 1)

Dr. Lawrence P. Grayson  
 USA (years 2 and 3)

UNESCO SECRETARIAT LIAISON

Mr. Andri Isaksson  
 Regional Adviser  
 Division of Structures, Content, Methods and Techniques of Education  
 UNESCO  
 Paris, France

FOR FURTHER INFORMATION

## Contact:

Dr. Lawrence P. Grayson  
 National Institute of Education  
 Washington, DC 20208

(202) 254-5740