The World of Learning 1995 (Vol.1)

# The World of Learning 1995

FORTY-FIFTH EDITION

#### Forty-fifth Edition 1995

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# The World of Learning 1995

#### FORFWORD

We have once again tried to ensure that we include the latest possible information concerning entries in THE WORLD OF LEARNING. Every year a folder containing the previous year's proof is sent to each entry; continuous research in the world press and educational journals, as well as contact with official sources all over the world, supplements this method of revision.

One challenge which we face continually in publishing THE WORLD OF LEARNING is fitting an increasing amount of information into a single compact volume. The book has grown for the present edition, for instance, by more than twenty pages, in spite of the deletion of many defunct institutions, growth being particularly marked in the numbers of research institutes and universities. We shall continue to accommodate new institutions while re-evaluating the kinds of information covered, in order to make the best use of the space available.

We are always grateful to those individuals and organizations who help us to bring our information up to date with their prompt replies. We particularly emphasize the necessity for revised entries to be returned to us without delay, since important material may otherwise be held over until a later edition. Only by maintaining a strict timetable can the regular production of such a large work as THE WORLD OF LEARNING be assured.

In co-operation with IFLA we invite all institutions in the book to indicate by the sign † those of their periodical publications which are available for exchange. We ask readers who are interested in the exchange of publications to communicate directly with the institution concerned, and not with us.

We should like to point out that in the sections on Universities and Colleges our classification usually follows the practice of the country concerned. This in no way implies any official evaluation on our part. We suggest that readers who are interested in the matter of equivalences of institutions, degrees or diplomas, should correspond directly with the institution concerned, or with the national or international bodies set up for this purpose.

October 1994

# ABBREVIATIONS

AAAS	American Association for the Advancement	CNAA	Council for National Academic Awards
	of Science	CNR	Consiglio Nazionale delle Ricerche
Acad. ACLS	Academy; Academician American Council of Learned Societies	CNRS	Centre National de la Recherche
ACLS		Со	Scientifique
Admin.	Australian Capital Territory Administrative, Administration	Comm.	Company; County Commission
AGMIN. AFRC	Agricultural and Food Research Council	Comm.	Commission
AF KC AIA	3	Conf.	Conference
AIA AIChE	American Institute of Architects		
	American Institute of Chemical Engineers	Corpn	Corporation
ALECSO	Arab League Educational, Cultural and Scientific Organization	Corresp. CP	Correspondent, Corresponding
Alta	Alberta		Case postale: Caixa posta. Contador
AP	Andhra Pradesh	Cr	
ASCE	American Society of Civil Engineers	CSIRO	Commonwealth Scientific and industrial Research Organization
Assen	Association	CTFT	Centre Technique Forestier Tropical
Assoc.	Associate	Cttee	Committee
Asst.	Assistant	Citee	Committee
ATC	Art Teacher's Certificate	Del.	Delegate, delegation
	Attorney	Dept	Department
Atty AUPELF	Association des Universités Partiellement	DES	Department of Education and Science
AUFELF	ou Entièrement de Langue Française	Dir	Director
Avv.	Avvocato (Advocate)	Dist.	District
	.ivvocato (navocate)	Dr	Doctor
BA	Bachelor of Arts	Drs	Doctorandus (Netherlands higher degree:
BC	British Columbia	DSIR	Department of Scientific and Industrial
BILD	Bureau International de Liaison et de		Research
	Documentation	Е	East: Eastern
Bldg	Building	EC	European Community
Blvd	Boulevard	ECOSOC	Economic and Social Council (UN)
BMA	British Medical Association	ECSC	European Coal and Steel Community
BP	Boîte postale	EEC	European Economic Community
Br.	Branch	ENEA	Comitato Nazionale per la ricerca e lo
BRGM	Bureau de Recherches Géologiques et Minières	21,211	sviluppo dell'Energia Nucleare e delle Energie Alternative
Bro.	Brother	EngD	Doctor of Engineering
BSc	Bachelor of Science	ESA	European Space Agency
B/TEC	Bachelor of Technology	ESCAP	Economic and Social Commission for Asiand the Pacific
c.	circa (approximately)	ESRC	Economic and Social Research Council
CAE	College of Advanced Education	Est.	Established
CAR	Central African Republic	ETH	Eidgenössische Technische Hochschule
Ccl	Council	Exec.	Executive
CEA	Commissariat à l'Energie Atomique		2 1 1
CEO	Chief Executive Officer	f.	founded
CERN	European Organization for Nuclear Research	FAO Fed.	Food and Agriculture Organization Federation, Federal
CGIAR	Consultative Group on International	fmr	former
	Agricultural Research	Fr	Father
Chair.	Chairman	F.t.e.	Full-time equivalent (staff)
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le	F.U.T.	Federal University of Technology
C .	Développement	Gen.	General
Cmdr	Commander	Gov.	Governor

#### **ABBREVIATIONS**

Govt	Government	IUIS	International Union of Immunological
		1015	Societies
HQ HE	Headquarters His Eminence; His (Her) Excellency	IUMS	International Union of Microbiological Societies
HM	His (Her) Majesty	IUNS	International Union of Nutritional Sciences
HND	Higher National Diploma	IUPAB	International Union of Pure and Applied
Hon.		TOTAB	Biophysics
HRH	Honourable; Honorary His (Her) Royal Highness	IUPAC	International Union of Pure and Applied Chemistry
IAEA	International Atomic Energy Agency	IUPAP	International Union of Pure and Applied Physics
IAU	International Astronomical Union	IUPHAR	International Union of Pharmacology
IBE	International Bureau of Education	IUPS	International Union of Physiological
ICAR	Indian Council of Agricultural Research	1015	Sciences
ICPHS	International Council for Philosophy and Humanistic Studies	IUTAM	International Union of Theoretical and Applied Mechanics
ICSU	International Council of Scientific Unions		Space • • Color Co
IEC	International Electrotechnical Commission	JI	Jalan (Indonesia, Malaysia)
EMVT	Institut d'Elevage et de Médecine	m.	million
IT AN	Vétérinaire des Pays Tropicaux	MA	Master of Arts
IFAN	Institut Fondamental d'Afrique Noire	MAFF	Ministry of Agriculture, Fisheries and Food
IFREMER	Institut Français de Recherche pour	Man.	Manager, Managing; Manitoba
IFLA	l'Exploitation de la Mer	Mem(s)	Member(s)
ILDA	International Federation of Library Associations and Institutions	Mgr	Monseigneur: Monsignor: Magister
IGU .	International Geographical Union		(Master's degree)
IICA	Instituto Interamericano de Cooperación	Min.	Minister: Ministry
	para la Agricultura	MIT	Massachusetts Institute of Technology
'L.O	International Labour Organization	MRC	Medical Research Council
MU	International Mathematical Union	MS	Master of Science
nc.	Incorporated	MSc	Master of Science
incl.	including	N	North: Northern
nd.	Independent	NASA	National Aeronautics and Space
MFN	Istituto Nazionale di Fisica Nucleare	1111011	Administration
INRA	Institut National de la Recherche	Nat.	National
_	Agronomique	NB	New Brunswick
Instn	Institution	ND	North Dakota; National Diploma
Int.	International	NDD	National Diploma in Dairying
(r	Ingénieur (Engineer)	NERC	Natural Environment Research Council
iRAT	Institut de Recherches Agronomiques	NGO	Non-Governmental Organization
IDO	Tropicales et des Cultures Vivrières	NS	Nova Scotia
IRC	Institut de Recherches sur le Caoutchouc	NSW	New South Wales
IRCC	Institut de Recherches du Café, du Cacao et autres plantes stimulantes	NUI	National University of Ireland
IRCT	Institut de Recherches du Coton et des	NZ	New Zealand
IDEA	Textiles Exotiques	OAS	Organization of American States
IRFA	Institut de Recherches sur les Fruits et Agrumes	ODA	Overseas Development Administration
IRHO	Institut de Recherches pour les Huiles et Oléagineux	OECD	Organisation for Economic Co-operation and Development
ISME	International Society for Music Education	OFS	Orange Free State
ISO	International Organization for	OIC	Organization of the Islamic Conference
100	Standardization	On.	Onorevole (Italian)
IUB	International Union of Biochemistry	ONERA	Office National d'Etudes et de Recherches
IUBS	International Union of Biological Sciences	_	Aérospatiales
UCr	International Union of Crystallography	Ont.	Ontario
· 'GC	International Union of Geodesy and	Org.	Organization
	Geophysics	OU	Open University
IUGS	International Union of Geological Sciences	PCSIR	Pakistan Council of Scientific and
IUHPS	International Union of the History and Philosophy of Science	PEI	Industrial Research Prince Edward Island
	• • • • • • • • • • • • • • • • • • • •		ee Banara Islana

#### ABBREVIATIONS

PEN	Poets, Playwrights, Essayists, Editors and Novelists (Club)	SIPRI	Stockholm International Peace Research Institute
PhD	Doctor of Philosophy	Soc.	Society
PMB	Private Mail Bag		
POB	Post Office Box	UK	United Kingdom
Pres.	President	UN	United Nations
Prof.	Professor	UNDP	United Nations Development Programme
Publ(s)	Publication(s)	UNESCO	United Nations Educational, Scientific and Cultural Organization
q.v.	qu'id vide (which see)	UNICEF	United Nations International Children's Emergency Fund
		Univ.	University
Rep.	Representative: Represented	UNRWA	United Nations Relief and Works Agency
retd	retired .	UNU	United Nations University
Rev.	Reverend	UP	Uttar Pradesh (United Provinces)
RIBA	Royal Institute of British Architects	URSI	Union Radio-Scientifique Internationale
RP	Révérend Père	USA	United States of America
Rt Hon.	Right Honourable	USIS	United States Information Service
Rt Rev.	Right Reverend		
		Vols	Volumes
S	South: Southern	***	117
SA	South Africa(n); South Australia	W	West: Western
SDI	Selective Dissemination of Information	WA	Western Australia
Sec.	Secretary	WHO	World Health Organization
SERC SHND	Science and Engineering Research Council Scottish Higher National Diploma	÷	indicates a periodical title available for exchange

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# INTERNATIONAL

# UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

7 place de Fontenoy, 75700 Paris, France Telephone: 45-68-10-00

Telex: 204461 Fax: 45-67-16-90

UNESCO was established in 1946 for the purpose of advancing, through the educational, scientific and cultural relations of the peoples of the world, the objectives of international peace and the common welfare of mankind'.

#### **Functions**

UNESCO's activities are funded through a regular budget provided by member states and also through other sources, particularly the UNDP.

#### International Intellectual Co-operation

UNESCO assists the interchange of experience, knowledge and ideas through a world network of specialists. Apart from the work of its professional staff, UNESCO co-operates regularly with the national associations and international federations of scientists, artists, writers and educators, some of which it helped to establish.

UNESCO convenes conferences and meetings, and co-ordinates international scientific efforts; it helps to standardize procedures of documentation and provides clearing house services; it offers fellowships; and it publishes a wide range of specialized works, including source books and works of reference.

UNESCO promotes various international agreements, including the Universal Copyright Convention and the World Cultural and Natural Heritage Convention, which member states are invited to accept.

#### Operational Assistance

UNESCO has established missions which advise governments, particularly in the developing member countries, in the planning of projects; and it appoints experts to assist in carrying them out. The projects are concerned with the teaching of functional literacy to workers in development undertakings; teacher training; establishing of libraries and documentation centres; provision of training for journalists, radio, television and film workers; improvement of scientific and technical education; training of planners in cultural development; and the international exchange of persons and information.

#### Promotion of Peace

UNESCO organizes various research efforts on racial problems, and is particularly concerned with prevention of discrimination in education, and improving access for women to education. It also promotes studies and research on conflicts and peace, violence and obstacles to disarmament, and the role of international law and organizations in building peace. It is stressed that human rights, peace and disarmament cannot be

dealt with separately, as the observance of human rights is a prerequisite to peace and vice versa.

#### Member States

(February 1994)

Afghanistan Albania Algeria Andorra Angola Antigua and Barbuda Argentina Armenia

Aruba (Associate Member)

Australia Austra Azerbaijan Bahamas Bahrain Bangladesh Barbados Belarus Belgium Belize Benin Bhutan

Bolivia Bosnia and Herzegovina

Botswana

Brazil British Virgin Islands (Associate Member)

Bulgaria
Burkina Faso
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Central Africa

Central African Republic

Chad Chile

Colombia

Comoros

China, People's Republic

Congo
Cook Islands
Costa Rica
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Denmark
Djibouti
Dominica
Dominica Republic

Ecuador Egypt El Salvador

Equatorial Guinea Eritrea Estonia Ethiopia Fiji Finland France Georgia Germany Ghana Greece Grenada Guatemaia Guinea Guinea-Bissau Guvana Haiti Honduras Hungary Iceland India Indonesia Iran Iraq Ireland Israel Italy Jamaica Japan Jordan Kazakhstan Kenya

Gabon

Gambia

Korea, Democratic People's Republic

Korea, Democra Korea, Republic Kuwait Kyrgyzstan Laos Latvia Lebanon Lesotho Liberia Libva

Lithuania

Kiribati

Luxembourg Macedonia (former Yugoslav republic)

Madagascar Malawi Malaysia Maldives Mali Malta Mauritania Mauritius Mexico Moldova Monaco Mongolia Morocco Mozambique Myanmar Namibia Nepal Netherlands

Netherlands Antilles (Associate Member)

New Zealand Nicaragua Niger Nigeria Niue Norway Oman Pakistan Panama Papua New Guinea Paraguay Peru Philippines Poland Portugal Qatar Romania Russia Rwanda St Christopher and Nevis St Lucia St Vincent and the Grenadines Samoa San Marino São Tomé and Principe Saudi Arabia Senegal Sevenelles Sierra Leone Slovakia Slovenia Solomon Islands Somalia Spain Sri Lanka Sudan Suriname Swaziland Sweden Switzerland Svria Tajikistan Tanzania Thailand Togo Tonga Trinidad and Tobago Tunisia Turkey Turkmenistan Tuvalu Uganda kraine nited Arab Emirates Uruguay Uzbekistan Vanuatu Venezuela Viet Nam Yemen Yugosiavia Zaire

# Organization

7.ambia

Zimbabwe

#### GENERAL CONFERENCE

The supreme governing body of the Organization. Meets in ordinary session once in two years and is composed of representatives of the member states.

#### EXECUTIVE BOARD

Consists of 51 members. Prepares the programme to be submitted to the Conference and supervises its execution. Meets twice or sometimes three times a year.

#### SECRETARIAT

Director-General: FEDERICO MAYOR (Spain). Director of the Executive Office: SOLOMON HAILU.

The Director-General has an international staff of some 2.500 civil servants. Of the professional staff (specialists in various disciplines and administrators), about two-thirds are away from headquarters on technical assistance missions to member states.

#### CO-OPERATING BODIES

In accordance with UNESCO's constitution,

national commissions have been set up in most member states. These help to integrate work within the member states and the work of UNESCO.

#### UNESCO LIAISON OFFICES

Office for Liaison with United Nations: Room 900, UN Bldg, 42nd St at First Ave, New York, NY 10017, USA.

UNESCO Liaison Office in Geneva: Villa des Feuillantines, Palais des Nations, CH-1211 Geneva, Switzerland.

#### UNESCO FIELD OFFICES

(See also under relevant country)

Africa: Ouagadougou (Burkina Faso), Yaoundé (Cameroon), Addis Ababa (Ethiopia), Nairobi (Kenya), Windhoek (Namibia), Lagos (Nigeria), Dakar (Senegal), Dar-es-Salaam (Tanzania), Kinshasa (Zaire), Lusaka (Zambia), Harare (Zimbabwe).

Arab States: Cairo (Egypt), Amman (Jordan), Beirut (Lebanon), Kuwait, Rabat (Morocco), Doha (Qatar), Tunis (Tunisia).

Asia and the Pacific: Phnom Penh (Cambodia), Beijing (People's Republic of China), Suva (Fiji), New Delhi (India), Jakarta (Indonesia), Kuala Lumpur (Malaysia), Islamabad (Pakistan), Bangkok (Thailand), Apia (Western Samoa).

Europe and North America: Vienna (Austria), Quebec (Canada), Paris (France), Hamburg (Germany), Venice (Italy), Bucharest (Romania), Moscow (Russia), Geneva (Switzerland), New York (USA).

Latin America and the Caribbean: St Michael (Barbados). Brasilia (Brazil). Santiago de Chile (Chile). Cartagena (Colombia), San José (Costa Rica). Havana (Cuba). Quito (Ecuador), Kingston (Jamaica). México (Mexico), Port-of-Spain (Trinidad and Tobago). Montevideo (Uruguay). Caracas (Venezuela).

#### Activities

#### **EDUCATION**

UNESCO has an overall policy of regarding education as a lifelong process. As an example, one implication is the increasing priority given to basic education for all, including early childhood care and development, primary education and adult education. This approach has been the guideline for many of the projects recently planned.

Each year expert missions are sent to member states on request to advise on all matters concerning education. They also help with programmes for training abroad, and UNESCO provides study fellowships; in these forms of assistance priority is given to the rural regions of developing member countries. The issues and problems involved in human resources development have been at the forefront of UNESCO's education programme since the Organization's foundation. Objectives include the eradication of illiteracy, universal primary education, secondary education reform, technical and vocational education, higher education, population education, and education of women and girls. 1990 was 'International Literacy Year'. A world conference on 'Education for All' was held in Thailand. In addition to its regular programme budget, UNESCO's extrabudgetary sources include the World Bank, UNDP, UNFPA, UNICEF, etc.

### NATURAL SCIENCES AND TECHNOLOGY

While the main emphasis in UNESCO's work

in science and technology is on harnessing these to development, and above all on meeting the needs of developing countries. the Organization is also active in promoting and fostering collaborative international projects among the highly industrialized countries. UNESCO's activities can be divided into three levels: international, regional and subregional, and national.

At the international level, UNESCO has over the years set up various forms of intergovernmental co-operation concerned with the environmental sciences and research on natural resources. The Man and Biosphere Programme (MAB) has initiated more than 1.000 programmes in 100 countries, involving local people in solving practical problems of environmental resource management in such areas as arid lands, humid tropical zones, mountain eco-systems, urban systems, etc.; the International Geological Correlation Programme (IGCP) has run altogether 168 projects; the International Hydrological Pro-gramme (IHP) deals with the scientific aspects of water resources assessment and management; the Intergovernmental Oceanographic Commission (IOC) (q.v.) promotes scientific investigation into the nature and resources of the oceans through the concerted action of its member states; the International Lithosphere Programme was set up in 1981 by ICSU, IUGG and IUGS, to succeed the International Geodynamics Programme. Another programme, the Intergovernmental Informatics Programme (IIP), has been set up to foster, through education, information exchange and co-operation in the computer sciences, a reduction in the gap between developed and developing countries in this field. Major disciplinary programmes are promoted in the fields of physics (including support to the International Centre for Theoretical Physics), the chemical sciences. life sciences, including applied microbiology, mathematics, informatics, engineering sciences and new sources of energy.

At the regional and sub-regional level. UNESCO develops co-operative scientific and technological research programmes through organization and support of scientific meeting and contracts with research institutions, and the establishment or strength-

ening of co-operative networks.

At the national level, UNESCO assists member states, upon request, in policy-making and planning in the field of science and technology generally, and by organizing training and research programmes in basic sciences, engineering sciences and environmental sciences, particularly work relevant to development, such as projects concerning the use of small-scale energy sources for rural and dispersed population.

#### SOCIAL AND HUMAN SCIENCES

UNESCO promotes teaching and research in the field of social and human sciences and encourages their application to a number of priority issues relating to education, development, urbanization, population, youth, human rights, democracy and peace. The social sciences constitute a link between the Organization's two main functions: international intellectual co-operation leading to reflection on major problems, and action to solve these problems.

Among the Organization's subjects of research are the complex relations between demographic changes and socio-cultural transformation on a global scale; the ways in which societies react to global climatic and environmental change; and changes affecting women and families.

women and families.

UNESCO's programme gives high priority to the problems of young people who are the

first victims of unemployment, economic and social inequalities and the widening gap between developing and industrialized countries. Under the mobilizing project 'Youth shaping the Future', an International Youth Clearing House and Information Service was to be established in order to build up the body of knowledge available on the situation of young people in society and to increase awareness of their needs, aspirations and potential among public and private decision-makers.

The struggle against all forms of discrimination is a central part of the Organization's programme. It disseminates scientific information aimed at combating racial prejudice, works to improve the status of women and their access to education, and promotes equa-

lity between men and women.

The Organization's action in favour of Least Developed Countries (LDC), to which the international community has given high priority for the 1990s, has been boosted by the creation of an LDC Unit within the social and human sciences sector.

#### CULTURE

In the field of cultural heritage, the programme concentrates on three major lines of action: activities designed to foster the worldwide application of three international conventions aiming at protecting and preserving cultural property and inserting it into the life of contemporary societies; operational activities such as international safeguarding campaigns designed to help member states to conserve and restore monuments and sites; activities designed to improve the quality of museum management, to train specialists, to disseminate information, such as the most upto-date conservation methods and techniques, and to promote greater public awareness of the value of cultural heritage.

In addition to a new edition of the History of the Scientific and Cultural Development of Mankind, work is continuing on histories of Africa, Latin America, the Caribbean and the civilizations of Central Asia, as well as on a six-volume publication on the various aspects of Islamic culture. A 10-year programme for the collection and safeguarding of the non-physical heritage (oral traditions, traditional music, dance, medicine, etc.) was launched in

1988.

With respect to the cultural dimension of development, the programme includes continuing assistance to member states in the preparation and evaluation of cultural development policies, plans and projects and in the training of cultural development personnel. Proclaimed by the UN General Assembly in December 1986, the World Decade for Cultural Development was launched in January 1988 and will end in 1997. The principal objectives of the Decade are: acknowledging the cultural dimension in development; asserting and enhancing cultural identities: broadening participation in cultural ife; and promoting international cultural co-operation.

Following the approval by the General Conference of the Recommendation concerning the Status of the Artist, efforts are being made to encourage its systematic application in the member states. Particular attention is given to the promotion of music, dance, theatre, architecture, fine arts, design and arts and crafts, as well as the organization of interdisciplinary workshops and other experimental workshops related to the use of new technologies in artistic creation. To contribute to the mutual appreciation of cultures, UNESCO fosters, in the framework of the UNESCO Collection of Representative Works, translation and publication of literary masterpieces, publishes art albums, and produces

and disseminates records, cassettes, audiovisual programmes and travelling art exhibitions.

UNESCO's programme for the promotion of books and reading includes activities for the development of book publishing, production and distribution infrastructures as well as for the training of personnel in all the book fields (including editing, layout and design, ad hoc management courses and courses at university level). A mejor thrust of the programme is aimed at reinforcing the development of reading at all levels of society (and especially that of children) through promotional activities, reading animation programmes, book weeks and book years.

#### COPYRIGHT

UNESCO's programme in the field of copyright consists of the following types of activities: (i) those aimed at heightening member states' awareness of the role played by copyright as a stimulant to intellectual creativity: (ii) the preparation of international instruments, the implementation of which is assured by the Secretariat (among these instruments should be cited the Universal Copyright Convention which, guaranteeing the minimal protection of authors, facilitates the circulation of intellectual and cultural materials); (iii) activities intended to ensure the adequacy of traditional laws vis-à-vis the means of reproduction and of successive diffusion made possible by the latest technological revolutions in the field of reprography. satellites, computers, cable television, cas-settes and magnetic discs; (iv) the organization of individual or group training courses intended mainly for the nationals of developing countries; (v) activities to promote access to protected works; (vi) publications and a database on legislation for copyright specialists; (vii) production of a video to increase public awareness of the importance of copyright.

# COMMUNICATION, INFORMATION AND INFORMATICS

Since September 1990, UNESCO's programmes in communication, information and informatics have been brought together under the same administrative structure, in view of their close relationship and in order to ensure co-operation among them.

#### Communication

UNESCO's new programme, 'Communication in the Service of Humanity', which was adopted in 1989, has three main objectives: to ensure a free flow of information at both national and international levels; the wider and better-balanced dissemination of information without any obstacle to freedom of expression; and to strengthen communication capacities in the developing countries so that they may participate more actively in the communication process. The programme calls upon UNESCO and its Member States to work for the development of free, independent and pluralistic media in both the public and private sectors.

UNESCO's new communication strategy

UNESCO's new communication strategy also aims to reinforce the International Programme for the Development of Communication (IPDC) to increase resources for the development of communication. The IPDC, as UNESCO's main operational arm, receives project proposals from all regions of the world and can now support projects emanating from sources other than the public sector. Funds are piedged by donors once a year at the meetings of the programme's Intergovernmental Council, which decides on their alloca-

tion.

#### Information

The General Information Programme (PGI) was established in 1976 to provide a focus for UNESCO's activities in the fields of specialized information systems, documentation. libraries and archives. It is an intergovernmental transverse programme grouping those activities of the organization which aim to create and reinforce the utilization, organization and dissemination of specialized information in Member States for economic and social development, especially in the developing countries. An Intergovernmental Council of 30 members, elected by the UNESCO General Conference, is responsible for guiding the conception and planning of the programme.

The PGI programme aims to facilitate plans to modernize libraries and archives services: to encourage the application of norms; to train information specialists; and to establish specialized information networks. The aims of the programme are accomplished through technical assistance and improving access to scientific literature; the holding of national seminars on information policies; the furthering of pilot projects, preservation and conservation efforts under the Records and Archives Management Programme (RAMP): the training of users of library and information services; the reinforcement of activities relating to the micro version of the CDS/ ISIS software package; and the implementation of activities relating to the establishment of the Bibliotheca Alexandrina.

#### Informatics

UNESCO's Intergovernmental Informatics Programme (IIP) was set up to reinforce the promotion of international co-operation and to increase resources for collaborative efforts in informatics. Since 1988, IIP has launched numerous projects in informatics, providing multilateral and bilateral support for national and regional efforts. The projects, which underline the priorities established for IIP, concentrate on areas which include the development of human resources in informatics and the provision of infrastructure, as well as the establishment of regional networks in informatics.

#### **PUBLICATIONS**

UNESCO Courier: monthly illustrated journal devoted to the general interest of UNESCO; published in 36 languages.

UNESCO Sources: monthly, giving official information, records of meetings, reports, and articles on UNESCO's programme, etc.; English, French, Portuguese and Spanish.

Copyright Bulletin: quarterly review of special studies and documentation on the legislation in different countries, and on UNESCO's work on behalf of the harmonization of the various copyright laws; English, French, Spanish and Russian.

Museum: quarterly international review of museums and museology around the world. English, French. Spanish, Russian and Arabic.

Impact of Science on Society: quarterly reports on science as a major force for social change; English, French, Russian, Arabic, Chinese, Portuguese and Korean.

International Social Science Journal: quarterly journal; English, French, Spanish, Arabic and Chinese.

Nature and Resources: quarterly review on environment and conservation; official bulletin of the Man and Biosphere Programme, the International Hydrological Programme and the International Geological Correlation Programme; English, French, Spanish, Russian.

Prospects: quarterly review on education; English, French, Spanish, Russian, Arabic and Chinese.

#### INTERNATIONAL INSTITUTE FOR EDUCATIONAL PLANNING (IIEP)

7-9 rue Eugène Delacroix, 75116 Paris, France

Telephone: 45-03-77-00

Telex: 640032 Fax: 40-72-83-66

Established by UNESCO in 1963 to serve as a world centre for advanced training and research in educational planning. Its purpose is to help all member states of UNESCO in their social and economic development efforts, by enlarging the fund of knowledge about educational planning and the supply of competent experts in this field.

Legally and administratively a part of UNESCO, the Institute enjoys intellectual autonomy, and its policies and programme are controlled by its own Governing Board, under special statutes voted by the General

Conference of UNESCO.

Chairman of Governing Board: Prof. VICTOR URQUIDI.

Director: JACQUES HALLAK.

A catalogue of publications, listing over 300 titles, is available on request.

# INTERNATIONAL BUREAU OF EDUCATION (IBE)

CP 199, 1211 Geneva 20, Switzerland

Telephone: (22) 798-14-55

Telex: 415771 Fax: (22) 798-14-86

Founded in 1925, the IBE became an intergovernmental organization in July 1929 and was incorporated into UNESCO in January 1969 as an international centre of comparative education.

#### COUNCIL

The Council of the IBE is composed of representatives of 24 member states designated by the General Conference of UNESCO.

Director: Juan Carlos Tedesco.

#### **FUNCTIONS**

International Conference on Education (every two years).

International Education Library: 100,000 vols; some 1,200 journals received regularly; over 350,000 research reports on microfiche.

#### BUDGET

Financed from the budget of UNESCO.

#### **PUBLICATIONS**

International Yearbook of Education.

Prospects, international comparative education review.

Ibedata, reference series (thesaurus, terminologies and directories).

International Bureau of Education Bulletin† (quarterly).

Educational Innovation and Information† (quarterly newsletter).

#### UNITED NATIONS UNIVERSITY

53-70 Jingumae 5-chome, Shibuya-ku, Tokyo 150, Japan

Telephone: (3) 3499-2811

Telex: 25442

Fax: (3) 3499-2828

(Office in Europe: c/o UNESCO. 1 rue Miollis, 75732 Paris Cedex 15, France; tel. (331) 45-68-30-07; telex 270602; fax 40-65-91-86) (Office in North America: Room DC2-1462-

70, United Nations, New York, NY 10017, USA; tel. (212) 963-6387; telex 422311; fax (212) 371-9454)

The University is an autonomous institution within the UN framework and is sponsored jointly by UN and UNESCO. It is guaranteed academic freedom by a charter approved by the General Assembly in 1973. Its work began in September 1975. The UNU is governed by a 24-mem. Council who are appointed by the Sec.-Gen. of the UN and the Dir-Gen. of UNESCO to serve for six years. They come from various regions of the world and have diverse academic backgrounds.

diverse academic backgrounds.

The UNU is funded by voluntary contributions from the govts of many countries, bilateral and multilateral development assistance agencies, foundations, and other public and private sources. The UNU receives no funds from the regular budget of the UN; contributions are made to the UNU Endowment Fund, which yields investment income, and to its operating funds, as well as to specific

programmes and projects.

The UNU undertakes problem-oriented, multidisciplinary research on the problems of human survival, development and welfare that are the concern of the UN and its agencies, and works to strengthen research and training capabilities in developing countries. The programme covers the areas of: universal human values and global responsibilities; new directions for the world economy; sustaining global life-support systems; advances in science and technology; and population dynamics and human welfare. Although the

UNU has no students or degree courses, it conducts various training activities in association with its programme and provides fellowships for post-graduate scientists and scholars from developing countries.

The research, training and dissemination activities of the UNU are carried out mainly through networks of collaborating institutions and individual scientists and scholars. These include associated institutions, which are universities and research institutes linked with the University under general agreements of co-operation. The programme is co-ordinated by the University Centre in Tokyo and by research and training centres and programmes (RTC/Ps) that are being established by the UNU to deal with long-term problems and needs. By 1993, five RTC/Ps had been established: the UNU World Institute for Development Economics Research (UNU/ WIDER) in Helsinki, Finland (1985): the UNU Institute for New Technologies (UNU/ INTECH) in Maastricht, Netherlands (1990); the UNU International Institute for Software Technology (UNU/IIST) in Macau (1992); the UNU Institute for Natural Resources in Africa (UNU/INRA) in Accra, Ghana, with a mineral resources unit in Lusaka, Zambia (1990); and the UNU Programme for Biotechnology in Latin America and the Caribbean (UNU/BIOLAC) in Caracas, Venezuela (1988). An institute of advanced studies was expected to become operational in Tokvo. Japan, by 1995.

Rector: Prof. HEITOR GURGULINO DE SOUZA.

Vice-Rector: Prof. TARCISIO DELLA SENTA (acting).

Chairman of Council: LUCILLE MAIR.

#### UNIVERSITY FOR PEACE

Apdo postal 138 Ciudad Colon, Costa Rica Telephone: 2-49-10-72

Fax: 2-49-19-29

Founded 1980 by the UN but financially independent; will conduct academic research on all aspects of peace, including disarmament, conflict resolution and mediation, the relation between peace and development, and the effects on peace of migration and refugees; various int. and governmental institutions are collaborating with the university; library of 8,000 vols; first students were admitted in 1985.

Rector: Dr Jaime Montalvo Correa Vice-Rector: Dr Francisco Barahona Riera

Number of teachers: 16 Number of students: 25

Publications: Dialogue (in Spanish and English), Infopaz.

# INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS

International Council of Scientific Unions/Conseil international des unions scientifiques: 51 blvd de Montmorency, 75016 Paris, France; tel. 45-25-03-29; telex 645554; fax 42-88-94-31; ICSU was founded in 1931, succeeding the International Research Council founded in 1919, to co-ordinate international efforts in the different branches of science and its applications; to initiate the formation of international associations or

unions deemed to be useful to the progress of science; to enter into relations with the governments of the countries adhering to the Council in order to promote investigations falling within the competence of the Council. Adhering organizations represent 92 countries and 23 international unions. In December 1946 an agreement was signed between UNESCO and ICSU recognizing the latter as the co-ordinating and representative

body of international scientific unions; Pres. J. C. I. Doode; Vice-Pres H. A. MOONEY, SUN HONGLIE; Sec.-Gen. L. J. COHEN; Treas. Dr M. Petit; publs ICSU Year Bookt, ICSU Newslettert, Science International (quarterly).

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#### UNIONS FEDERATED TO THE ICSU

International Astronomical Union/Union astronomique internationale: 98 bis blvd Arago, 75014 Paris, France; tel. (33-1) 43-25-83-58; fax (33-1) 40-51-21-00; f. 1919 to facilitate co-operation between the astronomers of various countries and to further the study of astronomy in all its branches; 57 affiliated countries, 7,300 individual mems; Pres. A. A. BOYARCHUK (Russia); Gen. Sec. J. BERGERON (France); publs Transactions of the International Astronomical Union and Symposia organized by the International Astronomical Union.

International Geographical Union (IGU)/Union geographique internationale: f. 1922 to encourage the study of problems relating to geography, to promote and co-ordinate research requiring international co-operation, and to organize international congresses and commissions: 72 mem. countries: Pres. Prof. HERMAN TH. VERSTAPPEN (Netherlands); Sec.-Treas. Prof. E. EHLERS. Dept of Geography, University of Bonn. Meckenheimer Allee 166, 53115 Bonn; tel. (228) 739287; fax (228) 739272; publ. IGU Bulletin (annually).

International Mathematical Union: Instituto de Matemática Pura e Aplicada, Estrada Dona Castorina 110, 22.460 Jardim Botánico, Rio de Janeiro, RJ, Brazil; tel. (21) 294-9032; fax (21) 512-4112; f. 1950 to promote international co-operation in mathematics; to support and assist the International Congress of Mathematicians and other international scientific meetings or conferences; to encourage and support other international mathematical activities considered likely to

contribute to the development of mathematical science-pure, applied, or educational; 52 mem. countries; 2 commissions: Int. Comm. on Mathematical Instruction, Comm. for Development and Exchange; Joint Int. Comm. on the History of Mathematics, with the Int. Comm. on the History of Mathematics; Pres. Prof. J. L. LIONS; Sec.-Gen. Prof. J. PALIS.

International Union of Biochemistry and Molecular Biology: c/o Institute of Biochemistry and Molecular Biology, Technical University of Berlin, Franklinstr. 29, 10587 Berlin; tel. (30) 31424205; fax (30) 31424783; f. 1955 (a) to encourage the continuance of a series of International Congresses and Conferences of Biochemistry and Molecular Biology, (b) to promote international co-ordination of research, discussion and publication, (c) to organize a permanent co-operation between the societies representing biochemistry in the adherent countries, and (d) to contribute to the advancement of biochemistry in all its international aspects: 46 adhering bodies, 15 assoc. adhering bodies, five assoc. organizations; Pres. Prof. K. Yagi (Japan); Sec.-Gen. H. Kleinkauf (Germany); Treas. Prof. A. W. Linnane (Australia).

International. Union of Biological Sciences/Union internationale des sciences biologiques: 51 blvd de Montmorency, 75016 Paris, France; tel. (1) 45-25-00-09; telex 645554; fax (1) 45-25-20-29; f. 1919 for the promotion of international co-operation in biology; 42 countries are represented in 72 int. scientific organizations; Exec. Dir Dr T. Younes; publs Biology International—The IUBS News Magazine† (2 a year) and Special Issues, Proceedings of the General Assemblies† (every 3 years).

International Union of Crystallography/ Union internationale de cristallographie: f. 1947 to promote international cooperation in crystallography; to contribute to the advancement of crystallography in all its aspects, including related topics concerning the non-crystalline states; to facilitate international standardization of methods, of units, of nomenclature and of symbols used in crystallography; and to form a focus for the relations of crystallography to other sciences; 35 mem. countries: 15 commissions; Pres. Prof. A. AUTHER (France); Gen. Sec. and Treas. Prof. A. I. HORDVIK (Norway); Exec. Sec. Dr J. N. KING. 2 Abbey Square, Chester. CH1 2HU, England: tel. (244) 345431: fax (244) 344843; publs Acta Crystallographica, Section A (every 2 months), Section B (every 2 months), Section C (monthly), Section D (every 2 months), Journal of Applied Crystallography (every 2 months), Structure Reports (2 vols a year), International Tables for Crystallography, World Directory of Crystallographers, Index of Crystallographic Supplies, Bibliographies, etc.

International Union of Geodesy and Geophysics/Union geodésique et géophysique internationale: C/o Bureau Gravimétrique International (Attn. Dr G. Balmino), Ave E. Belin 18, 31055 Toulouse Cedex, France; tel. 61-33-29-80; fax 61-25-30-98; f. 1919 to promote the study of problems relating to the form and physics of the earth; to initiate, facilitate and co-ordinate research into those problems of geodesy and geophysics which require international co-operation; to provide for discussion, comparison and publication. The Union is a federation of 7 associations representing Geodesy, Seismology and Physics of the Earth's Interior, Physical Sciences of the Ocean. Volcanology and Chemistry of the Earth's Interior, Hydrological Sciences, Meteorology and Atmospheric Physics, Geomagnetism and Aeronomy, which meet at the General Assemblies of the Union. In

addition, there are Joint Committees of the various associations either among themselves or with other unions. The Union organized scientific meetings and also sponsors various permanent services, the object of which is to collect, analyse and publish geophysical data: 78 mem. countries; Pres. H. MORITZ (Austriaty Vice-Pres. P. J. WYLLIE (USA); Sec.-Gen. G. BALMINO (France); public IUGG Chronicle (every 2 months), IUGG Monographs (irregular), Proceedings of Assemblies; in addition each member association has its own series of publs.

International Union of Geological Sciences/Union internationale des sciences géologiques: IUGS Secretariat, Geological Survey of Norway, Lade, POB 3006, 7002 Trondheim, Norway; tel. (7) 90-43-15; telex 55417; fax (7) 90-43-04; f. 1961 as an offspring of the International Geological Congress: mems from 96 countries: Pres. Prof. U. G. Cordani (Brazil); Vice-Pres. Prof. V. L. Barsukov (CIS), Dr. M. Bensaid (Morocco), Dr. W. G. E. Caldwell, Canada), Dr. G. OKESSE (Ghana), Prof. J. F. Lovering (Australia), Prof. N. Petitt-Maire (France), Prof. Serya Uyeda (Japan), Dr. Zhang Bingki (People's Republic of China); Sec.-Gen. Dr. R. Brett (USA); publs Episodes, International Geoscience Newsmagazine (quarterly), Reviews or Annotated bibliographies on geological topics of current interest (irregular).

International Union of Immunological Societies (IUIS)/Union Internationale des Societés d'Immunologie: Dept of Surgery, (WGH), University of Edinburgh Medical School. Teviot Place. Edinburgh. EH8 9AG, Scotland; tel. (31) 650-3557; fax (31) 667-6190; 44 national and regions societies: Pres. HENRY METZGER; Sec.-Gen. KEITH JAMES (UK).

International Union of Microbiological Societies (IUMS)/Union internationale des sociétés de microbiologie: Institut de Biologie Moléculaire et Cellulaire du CNRS, 15 rue Descartes, 67084 Strasbourg Cedex, France; tel. 88-41-70-22; fax 88-61-06-80; f. 1930; mems: 90 national societies; Sec.-Gen. MARC H. V. VAN REGENMORTEL (France); publs International Journal of Systematic Bacteriology (quarterly), The World Journal of Microbiology and Biotechnology (every 2 months), Archives of Virology (every 2 months), International Journal of Food Microbiology (every 2 months), Advances in Microbial Ecology (annually), Journal of Biological Standardisation (quarterly).

International Union of Nutritional Sciences (IUNS)/Union Internationale des Sciences de la Nutrition: f. 1946 to study the science of nutrition and its applications: 64 corporate mems; Pres. Prof. A. VALYASEWI (Thailand); Vice-Pres. Prof. A. A. RÉRAT (France), Prof. S. BERGER (Poland), Dr VINODINI REDDY (India); Sec.-Gen. Prof. Dr J. G. A. J. HAUTVAST, c/o Dept of Human Nutrition, Agricultural Univ., Bomenweg 2, POB 8129, 6700 EV Wageningen, Netherlands; tel. (8370) 82589; fax (8370) 83342; Treas. Prof. E. MENDEN (Germany).

International Union of Pharmacology (IUPHAR)/Union Internationale de Pharmacologie: f. 1959 as section of Int. Union of Physiological Sciences, independent 1966; promotes international co-ordination of research, discussion, symposia, and publication in the field of pharmacology; co-operates with WHO in matters concerning drugs and drug research, and with related international unions; four-yearly international congresses; 47 national and 3 regional memsocs; integral sections of Clinical Pharmacology, Toxicology and of Drug Metabolism, which also arrange international meetings;