Monday 28 May 2007, 4.00- 6.00 p.m.
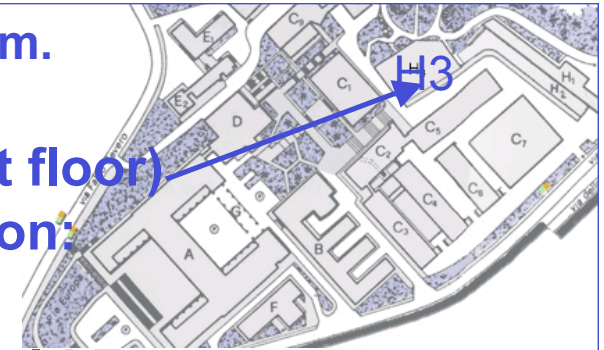**University of Trieste**
Building H3, Lecture Room 1A (first floor)
Special International Presentation:

H3

HIGHLIGHTS of the G8-UNESCO World Forum
on 'Education, Research and Innovation: New Partnership for
Sustainable Development', held in Trieste, May 2007
(In English) All students, researchers, lecturers are cordially invited

Program
16,00 Introduction: Education-Research-Innovation **- Gianrossano GIANNINI (TS/Italy)** (10')
16,10 Why UNESCO? Why Africa? Why Trieste?**- Paolo ALESSI (TS/Italy+UNESCO)** (10')
16,20 Education in the Knowledge-Based Society **- Gabriele GARBIN (TS/Italy+UNESCO)**(10')
16,30 Environment: Global Challenges **- Gianrossano GIANNINI (TS/Italy)** (10')
16,40 Innovation and Society **- Rachel OBED (Nigeria+ICTP)** (10')
16,50 Sustainable Development and Health **- Omer A. Ali (Sudan+ICTP)** (10')
17,00 Sustainable Development and Energy **- Gabriele GARBIN (TS/Italy+UNESCO)** (10')
            & Anna Maria Novello (TS/Italy) (5')
17,15 Research and Innovation: Role of Governments**-Patrizia TIBERI VIPRAIO (UD/Italy))**(5')
            & Rachel OBED (Nigeria+ICTP))(5')
17,25 Knowledge and Sustainable Development **Gianrossano GIANNINI (TS/Italy)** (10')
17,35 Science/Technology/Innovation: Perspectives for Africa**-Elie SIMO (Cameroon+ICTP)** (15')
17,50 Knowledge for Sustainable Development:The future **Patrizia TIBERI VIPRAIO(UD/Italy)**(10
18,00 End

UNESCO

United Nations Educational,
Scientific and Cultural Organization

Centro UNESCO di Trieste

WHY UNESCO
WHY AFRICA
WHY TRIESTE ?

PAOLO ALESSI

United Nations Educational,
Scientific and Cultural Organization

UNESCO, **United Nations Educational, Scientific and Cultural Organization.**

Its constitution **was adopted by the London Conference in November 1945, and entered into effect on the 4th of November 1946 when** 20 states **had deposited instruments of acceptance. It currently has** 188 Member States **(as of 19 October 1999).**

The *main objective* of UNESCO is:
to *contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication* **in order to further universal respect for justice, for the rule of law and for** *the human rights and fundamental freedoms without distinction of race, sex, language or religion,* **by the Charter of the United Nations.**

UNESCO performs five principal functions :

United Nations Educational, Scientific and Cultural Organization

Prospective Studies : **what forms of education, science, culture and communication for tomorrow's world?**

T*he advancement, transfer and sharing of knowledge* : **relying primarily on research, training and teaching activities.**

Standard –setting action: **the preparation and adoption of international instruments and statutory recommendations.**

Expertise : **provided to Member States for their development policies and projects in the form of "technical co-operation".**

Exchange of specialized information.

UNESCO
United Nations Educational,
Scientific and Cultural Organization

The Organization

GOVERNING BODIES : General Conference and Executive Board

DIRECTOR-GENERAL

SECRETARIAT : Field Offices & Institutes UNESCO Networks

- **Themes**
- Education   Natural Sciences   Social & Human Sciences

- **Communities**
- **Member States**
  - Permanent Delegations   National Commissions
  - Ministries   National Institutions   Cities and Local Authorities
- **United Nations System**
- **Intergovernmental and Non-Governmental Organizations**

![UNESCO logo] United Nations Educational, Scientific and Cultural Organization

Some of the themes

Cultural & Linguistic Diversity in Education

Peace & Human Rights

Education for Sustainable Development

Education Plans & Policies

Global Initiative on Education and HIV/AIDS - EDUCAIDS

Literacy Initiative for Empowerment - LIFE

Initiative for Teacher Education in Sub-Saharan Africa - TTISSA

Primary Education   Right to Education

School Health

Secondary, Technical & Science Education

Teacher Education

UNESCO Institutes and Centres

UNESCO European Centre for Higher Education
CEPES, Bucarest (Romania)
International Centre for Theoretical Physics
ICTP, Trieste (Italy)
UNESCO-IHE Institute for Water Education
Delft, Netherlands
UNESCO International Institute for Capacity-Building in Africa
IICBA, Addis Ababa (Ethiopia)
UNESCO Institute for Lifelong Learning
UIL, Hamburg (Germany)
UNESCO International Institute for Educational Planning
IIEP, Paris (France) and Buenos Aires (Argentina)
UNESCO International Institute for Higher Education in Latin America and the Caribbean
IESALC, Caracas (Venezuela)
UNESCO International Bureau of Education
IBE, Geneva, (Switzerland)
UNESCO Institute for Information Technologies in Education
IITE, Moscow (Russian Federation)
UNESCO International Centre for Technical and Vocational Education and Training
UNEVOC, Bonn (Germany)
UNESCO Institute for Statistics
UIS, Montreal (Canada)

UNESCO CLUBS

The UNESCO associations, centers and clubs are made up of groups of people of all ages and socio-professional backgrounds, who share the ideals of UNESCO, seek to popularize them and support the work of the Organization by carrying out their own activities that are inspired directly from those of UNESCO.
The movement spontaneously developed immediately after the creation of UNESCO. The first-ever UNESCO Club was created in Sendaï, Japan, on 19 July 1947.
The movement grew gradually and now includes some
5,000 UNESCO Associations, Centers and Clubs in over 120 countries.

UNI
TWIN

- **UNITWIN/UNESCO Chairs projects** deal with *training and research activities* and cover all major fields of knowledge within UNESCO's competence such as *Education, Human Rights, Cultural Development, Environment, Basic and Engineering Sciences, Communication*, etc.

- **The principal beneficiaries of this programme are institutions of higher learning in developing countries and countries in transition and hundreds of other organizations, foundations and companies are partners.**
  .
- **UNITWIN is the abbreviation for the UNIversity education WINning and networking scheme.**

- The Programme operates through the establishment of **UNESCO chairs, and UNESCO networks** which are also designated as UNITWIN projects.
  The UNITWIN Program was launched in 1992, this Program is UNESCO's most important inter sectoral downstream activity in the field of higher education with

- **635 UNESCO Chairs and Networks established in 124 Member States.**

**UNI
TWIN**

This UNESCO Programme serves as a prime means of *capacity building through the exchange of knowledge and sharing in a spirit of solidarity*. **Thus it promotes north-south and south-south cooperation as a strategy to enrich institutions.**

UNITWIN opens avenues for the higher education community *to join forces with UNESCO to achieve the objectives of the global agenda*.

UNITWIN projects have proven useful in establishing new teaching programmes, generate new ideas through research and reflection and have facilitated enrichment of existing university programmes through *integration of cultural diversity*.

Italy

UNESCO Interdisciplinary Chair in Biotechnology (112), established in 1998 at "Tor Vergata" Rome

UNESCO Chair in Human Rights, Democracy and Peace (450), 1999 at Univ. Padova

UNESCO Chair in Peace, Cultural Development and Cultural Policies (475), 1999 at the Jacques Maritain International Institute

UNESCO Chair in Management of the Cultural Heritage in the Balkan and Danubian Region (523), established in 2000 at the University of Trieste

Community of Mediterranean Universities (CMU) (333), 1992 at University of Bari

UNESCO Chair on Human Rights and Ethics of international Cooperation (625), 2003 at the University of Bergamo

UNESCO Chair in Cultural and Comparative Studies on the Imaginary (726), 2006 at Libera Università di Lingue e Comunicazione IULM, Milano

UNESCO Chair in Human Development and Culture of Peace (730), established in 2006 at Università degli Studi di Firenze

Mediterranean Basin UNITWIN Network for Green Chemistry (MEGREC UNITWIN Network) (731), 2006 at The Interuniversity Consortium Chemistry for the Environment –INCA, Venice

UNESCO Chair in Environmental Sciences and Management(114), 1995 at Cà Foscari University of Venice

UNESCO SYSTEM IN TRIESTE

THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS

the mission of ICTP is to foster studies and research, especially in developing countries

STRADA COSTIERA 11 - TRIESTE - ITALIA

THE ACADEMY OF SCIENCES FOR THE DEVEOLPING WORLD

promotes scientific excellence for sustainable development in the south

VIA BEIRUT 6 - TRIESTE - ITALIA

INTERNATIONAL INSTITUTE FOR HUMAN RIGHTS STUDIES

supports projects and activities related to Human Rights, Culture for Peace, Social Communication and Security

VIA MURAT 1 - TRIESTE - ITALIA

UNITWIN/UNESCO CHAIR IN MANAGEMENT OF THE CULTURAL HERITAGE IN THE BALCAN AND DANUBIAN REGION

promotes an integrated system of research, training and information in the field of cultural heritage management

FACOLTA' DI ARCHITETTURA, UNIVERSITA' DI TRIESTE - P.LE EUROPA 1 - TRIESTE - ITALIA

UNESCO CENTRE OF TRIESTE

promotes development and research policy and disseminates information on higher education

VIA DANTE 7 - TRIESTE - ITALIA

The Science and Technology Education Programme (STE)

In a world where every aspect of life is increasingly dependent upon science & technology (S&T), *promoting capacity-building and education* is indispensable for all nations in order to create a scientifically and technologically literate citizenry in the *interests of ensuring true democracy*. In the coming years, an increasing number of political decisions (in economy, environment, socio-cultural issues, etc) will be based on S&T. The increasing disaffection of children and youth for science and technology worldwide is a cause of major concern as *the children of today will be the citizens and decision makers of tomorrow*.

STE Actions

Gender   **Disadvantaged groups**

ICTs in Education   **Reforming learning content**

Sustainable development

WHY AFRICA

The main concern for African countries is to meet the needs for basic education of all young people by offering them a chance to receive quality teaching and to acquire skills crucial to the life

- **Basic Education**
- Early Childhood   Children on the Street

- Primary Teaching   Non formal Education
- Integrative Education
- **Secondary Education and Technical and Vocational Training**
- Reforms in Secondary Education
- **Science and technology**   Capacity Building
- **Scientific, Technical and Vocational Training for Girls**

Higher Education

- Politics and Reforms   The Promotion of Women
- University Co-operation   Teaching at University
- Teacher Training   Statutes of Teachers
- New Technologies   Distance Learning
- Capacity Building in Research

Orientations and Strategies in Education

- Missions and objectives
- SCHOOLCONSEM IV — Regional consultation on how to raise quality in terms of buildings, equipment and teaching materials for schools
- Development of Centres for Educational Resources (CER) in Sub-Saharan Africa (Co-Action Project – UNESCO Clubs – UNESCO)

Preventive Education

- HIV/AIDS Prevention in Education
  Education on Population Issues and Family Life

Gender

It is in the social interest *to eliminate gender inequalities in education and training*. **All people have a right to education. Significant gains it can be made at the** *secondary-school level and in technical and vocational education and training*. **Through education and training, girls and women can become more empowered as they acquire the range of skills, knowledge, attitudes and values critical for negotiating their place in society. As predicted by the GMR 2003/4,** 60% of the countries have not reached gender equality in basic education and 40% percent of countries will not achieve gender parity at either primary or secondary level.

Projects

- **Girls into Science Careers**
  Gender inclusive science and technology education
  Rural Girls and Secondary Education
  Scientific, Technical and Vocational Education of Girls in Africa in 12 African countries (Burkina Faso, Cameroon, Ghana, Kenya, Malawi, Mali, Mozambique, Senegal, Swaziland, Tanzania, Uganda).

TEACHING AT UNIVERSITY

Ways to improve and renovate higher education in Africa in the following areas:

- *reinforcing research capacities;*
- *modernizing the structures and systems of higher education;*
- *promoting university teaching.*

National and/or regional training workshops for teachers on university teaching aimed at:

- *Testing and improving the relevance and the quality of the guide project.*
- *Enriching and reviewing the guide project in order to address the concerns and the expectations of the whole higher education system in Africa.*
- *Proceeding to the training of trainers.*

UNIVERSITY CO-OPERATION

Reinforcement of regional co-operation, especially in :
- *Student, teacher and researcher exchanges*
- *Production of teaching materials*

Co-operation programmes, Activities and strategies :
- *Promotion , reinforcement and updating of a database of UNESCO professorships and university networks on the techniques of education and distance-learning*
- *Implementation of a regional convention for the recognition of study programmes and certificates, degrees .., across African states.*
- *Reinforcement co-operation with Santander Group.*
- *Reinforcement of research and post-graduate education in the UNESCO professorships in Africa.*
- *Organisation of training workshop on the recognition of programmes of study and diplomas.*
- *The preparation of a regional African mechanism of accreditation of training programmes*

TEACHER TRAINING

UNESCO dedicated an important part of its resources to training of primary school teachers in order to widen access to quality basic education.

- Setting up of a *regional African network of institutions offering pedagogical training for the promotion of the exchange of information, experiences and good practices on policies, programmes and use of new technologies in teacher training.*

DISTANCE EDUCATION

Promotion of open and distance learning in Sub-Saharan Africa.

NEW TECHNOLOGIES

To reinforce the science and mathematics syllabuses, it is important the
production of a multimedia virtual network aimed at strengthening the learning of Science, Mathematics and Technology in Sub-Saharan Africa.
The network will allow the teaching institutions *to train the teachers and the learners to work together on determining study levels, producing multimedia learning materials* …
Activities : Creation and training of a *group of specialists in multimedia production in each of the countries belonging to the network*

WHY TRIESTE

- The **First G-77** Summit held in **Havana,April 2000** decided to establish ***"The Consortium on Science Technology and Innovation for the South (COSTIS)"*** which was launched during   the Meeting of the Ministers of Science and Technology of the Group of 77 Member States held in **Angra dos Reis, Rio de Janeiro, Brazil, September 2006**, following the decision adopted by the Third World Network of Scientific Organizations (TWNSO) to transform itself into the Consortium . *The Secretariat for COSTIS was based in Trieste, Italy*.

1 ….. **I would like to take this opportunity to express my appreciation to the Government of Italy as well as to the Trieste System,and the Academy of Sciences for the Developing World (TWAS), for hosting this meeting.**

5…… **I wish to seize this opportunity to express our deep appreciation for the pivotal role the Trieste System has played in this endeavour. Institutions, such as the Trieste System, have demonstrated through their work that the only viable and proven way to achieve the Millennium Development Goals (MDGs) is through the efficient application of science and technology. We commend the significant role the Trieste System, especially TWAS, has played in the establishment of COSTIS. We are confident that COSTIS will build up on the experience that TWNSO has accumulated over the years in developing its own scientific programmes.**

COSTIS MISSION

To promote science-driven economic development and South-South and South-North cooperation in the *development and application of science and technology in developing countries;*

To encourage developing country governments to take appropriate actions and develop their scientific enterprise through *adequate allocation of resources and other necessary support;*

To promote the *integration of science and technology into the national development plans* of developing countries with a view to facilitating the solution of national problems;

COSTIS MISSION

To further the South's contribution to and involvement in *frontier science and technology programmes*, **which can have a** *strong impact upon the economic and social development of developing countries*;

To support the establishment of *cooperation among international centers of excellence and scientific institutions* **for a sustainable development**

To promote *the development of collaborative programmes between members of the Consortium and scientific institutions and organizations of the South, and their counterparts in the North* **and** *the development of bilateral links and cooperative programmes in areas of science, technology and the environment.*

Thursday, 10 May

Education in the Knowledge-Based Society

How to innovate education systems up to the requirements of a global knowledge-based society?
Identify the best models of education governance, teaching and management.
Identify (voluntary) guidelines for quality provisions in education across the world.
The challenges of implementing the Education for All (EFA) agenda at the country level: the role of the Global Action Plan.

Chair

Professor Lynn MEEK
Director
Centre for Higher
Education Management
and Policy (CHEMP)
School of Professional Development and Leadership - University of New England
AUSTRALIA

Keynote Speakers

Professor Mark BRAY
Director International Institute
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7-9, rue Eugène Delacroix
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Mr. Ludger VIEHOFF
Deputy Head of Division
Basic Policy Issues of
International and Multilateral
Cooperation
Federal Ministry of Education and Research
Germany

Professor Stefano FANTONI
Director
International School for
Advanced Studies (SISSA)
TRIESTE

Professor Furio HONSELL
Rector
University of Udine
Italy

Rapporteur

Dr. Hebe VESSURI
Senior Researcher and Head
of the Department of Science
Studies
Venezuelan Institute
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