



UNESCO at the
WORLD SUMMIT ON THE INFORMATION SOCIETY (WSIS)

Education and Knowledge Societies

ROUND TABLE DISCUSSION

Geneva, Switzerland
11 December 2003

UNESCO INSTITUTE FOR INFORMATION TECHNOLOGIES IN EDUCATION





UNESCO at the
World Summit on the Information Society (WSIS)

The authors are responsible for the choice and the presentation of the facts contained in this publication and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization.

Published in 2003
by the UNESCO Institute for Information Technologies
in Education

8 Kedrova St. (Bld. 3)
Moscow 117292
Russian Federation

Printed in the Russian Federation

TITLE	EDUCATION AND KNOWLEDGE SOCIETIES
TYPE	ROUND TABLE DISCUSSION
DATE	11 December 2003
TIME	9:30 – 13:00
PLACE	Geneva Palexpo, Room C
ORGANIZER	UNESCO Institute for Information Technologies in Education (IITE)
PARTNERS	Club of Rome (CoR) International Federation for Information Processing (IFIP) International Council for Open and Distance Education (ICDE) International Association of Universities (IAU) University of Mauritius, Virtual Centre for Innovative Learning Technologies (VCILT) and Lifelong Learning Cluster (LLC) Food and Agriculture Organization of the United Nations (FAO) NGO-UNESCO Liaison Committee

The event aims at attracting the attention of the Summit Stakeholders to the significance of education in the construction of knowledge societies and tasks of education in knowledge societies. Recent undertakings in the field of ICTs being a vehicle to develop Education for All, as well as cooperative efforts of UNESCO and NGOs building up education for and in knowledge societies will be reviewed.

The participants in the Round Table discussion (decision-makers and policy-makers in education, representatives of UN agencies and NGOs, educators, scientists and students) are invited to identify principles and recommendations, which can help the world community meet the challenges of knowledge societies.

TABLE OF CONTENTS

Agenda	6
Welcome address/DANIEL, John	9
Introduction: Education for Evolving Societies/KINELEV, Vladimir	10
Preamble to the Round Table discussion/CORNU, Bernard	17

SESSION I:	
EDUCATION FOR KNOWLEDGE SOCIETIES: TRENDS, CHALLENGES AND POLICIES	23
Preamble to Session I/CORNU, Bernard	25
Education and Knowledge Societies/ADAMKUS, Valdas	27
Knowledge Sharing and International Cooperation in Science Education/WEI, Yu	29
ICTs as an Innovator for Sustainable Development/WEILER, Raoul	30

SESSION II:	
EDUCATION IN KNOWLEDGE SOCIETIES: STRATEGIES, TOOLS, TEACHING AND LEARNING	33
Preamble to Session II/MOREL, Raymond	35
Education for Knowledge Societies: Learning to Work with Insecure Information & Communication Technologies/BRUNNSTEIN, Klaus	37
Teacher's Training: Central Challenge for Knowledge Societies/LOING, Bernard	39
Lifelong Learning in the Knowledge Society: Is There a Role for Higher Education?/WEERT, Tom J. van	41
Facilitating Lifelong Learning in Universities: the Role of ICTs/LANGLOIS, Claudine	44
Technology-Enhanced Education, Open Educational Resources and Non-formal Approaches to Lifelong Learning for Sustainable Development/SENTENI, Alain	47
Open Educational Resources/JOHNSTONE, Sally M.	49

SESSION III: UNESCO AS A KEY ACTOR IN THE DEVELOPMENT OF EDUCATION FOR AND IN KNOWLEDGE SOCIETIES	51
Preamble to Session III/BOLLERSLEV, Peter	53
The Challenges for Education and Knowledge in the Information Society/SENDOV, Blagovest	55
FAO-UNESCO Partnership on E-learning for Information and Knowledge Management/RUDGARD, Stephen; MANGSTL, Anton	56
ICTs in Knowledge Societies: a Tool for Access, Equity and Quality/FOUILHOUX, Monique	58
PARTICIPATING ORGANIZATIONS	59
UNESCO Institute for Information Technologies in Education (IITE)	61
Club of Rome (CoR)	64
International Federation for Information Processing (IFIP)	66
International Council for Open and Distance Education (ICDE)	68
International Association of Universities (IAU)	71
University of Mauritius, Virtual Centre for Innovative Learning Technologies (VCILT) and Lifelong Learning Cluster (LLC)	73
Food and Agriculture Organization of the United Nations (FAO)	75
NGO-UNESCO Liaison Committee	77
LIST OF PARTICIPANTS	79

AGENDA

9:30	Opening of the Round Table “EDUCATION AND KNOWLEDGE SOCIETIES”	Mr John Daniel , UNESCO ADG/ED; Mr Vladimir Kinelev , Director, UNESCO IITE
SESSION I	“Education for Knowledge Societies: Trends, Challenges and Policies”	<i>Chair and moderator:</i> Prof. Bernard Cornu (France), Director, La Villa Media – the European Residence for Educational Multimedia; Vice-Chairman of the IITE Governing Board
	General introduction	Prof. Bernard Cornu
<i>Paper 1</i>	<i>Education and Knowledge Societies</i>	Mr Valdas Adamkus (Lithuania), UNESCO Goodwill Ambassador for the Construction of Knowledge Societies; Former President of the Republic of Lithuania
<i>Paper 2</i>	<i>Knowledge Sharing and International Cooperation in Science Education</i>	Dr Yu Wei (China), Director, Research Center of Learning Sciences, Southeast University; Vice President of China Association of Science and Technology; Former Vice President of All China Women’s Federation; Former Vice-Minister of Education of the People’s Republic of China
<i>Paper 3</i>	<i>ICTs as an Innovator for Sustainable Development</i>	Prof. Raoul Weiler (Belgium), Professor, University of Leuven; Member of the Executive Committee (International) of the Club of Rome (CoR)
	Debate	Audience
10:35	SESSION II “Education in Knowledge Societies: Strategies, Tools, Teaching and Learning” (During the session: video link with the International Conference on Open and Online Learning organized under UNESCO’s sponsorship in Mauritius)	<i>Chair:</i> Prof. Bernard Cornu <i>Moderator:</i> Prof. Raymond Morel (Switzerland), Director, Geneva Educational Technology Centre (CPTIC)
	General introduction	Prof. Raymond Morel
<i>Paper 1</i>	<i>Education for Knowledge Societies: Learning to Work with Insecure Information & Communication Technologies</i>	Prof. Klaus Brunnstein (Germany), President of the International Federation for Information Processing (IFIP)
<i>Paper 2</i>	<i>Teacher’s Training: Central Challenge for Knowledge Societies</i>	Prof. Bernard Loing (France), Intergovernmental Liaison Officer and General Delegate of the International Council for Open and Distance Education (ICDE) at UNESCO

Towards Knowledge Societies

Geneva, Switzerland
10-12 December 2003

<i>Paper 3</i>	<i>Lifelong Learning in the Knowledge Society: Is There a Role for Higher Education?</i>	Drs. Tom van Weert (The Netherlands), Chair “ICT and Higher Education”, Professional University of Utrecht
<i>Presentations on Lifelong Learning</i>	<i>Facilitating Lifelong Learning in Universities: the Role of ICTs</i>	Dr Claudine Langlois , Director, International Association of Universities (IAU)/UNESCO Information Centre on Higher Education
	<i>Technology-Enhanced Education, Open Educational Resources and Non-formal Approaches to Lifelong Learning for Sustainable Development</i>	Prof. Alain Senteni (Mauritius), Director, Virtual Centre for Innovative Learning Technologies (VCILT), University of Mauritius (via video link)
	<i>Open Educational Resources</i>	Dr Sally M. Johnstone (USA), Executive Director, Western Cooperative for Educational Telecommunications (WCET), Western Interstate Commission for Higher Education (WICHE) (via video link)
	Debate	Audience
11:50	Session III “UNESCO as a Key Actor in the Development of Education for and in Knowledge Societies”	<i>Chair: Prof. Bernard Cornu</i> <i>Moderator: Prof. Peter Bollerslev</i> (Denmark), Director and Editor-in-Chief at SAXO Publishers
	General Introduction	Prof. Peter Bollerslev
<i>Paper 1</i>	<i>The Challenges for Education and Knowledge in the Information Society</i>	Mr Blagovest Sendov (Bulgaria), Ambassador of Bulgaria to Japan; Former President of Parliament of the Republic of Bulgaria
<i>Paper 2</i>	<i>FAO-UNESCO Partnership on E-learning for Information and Knowledge Management</i>	Dr Anton Mangstl , Director, Library and Documentation Systems Division, Food and Agriculture Organization of the United Nations (FAO); Dr Stephen Rudgard , Chief, WAICENT Outreach, Library and Documentation Systems Division, FAO
<i>Paper 3</i>	<i>ICTs in Knowledge Societies: a Tool for Access, Equity and Quality</i>	Mrs Monique Fouilhoux , President of the NGO-UNESCO Liaison Committee, President of the International NGOs Conference
	Debate	Audience
	Discussion and adoption of the final document	Prof. Bernard Cornu
	Closure of the Round Table	Mr John Daniel, Mr Vladimir Kinelev
13:00	End of the Round Table	



UNESCO at the
World Summit on the Information Society (WSIS)

DANIEL, John

Assistant Director-General for Education, UNESCO (2001 – Present)

Field: International educational administration

Professional Career:

- 1990 – 2001: Vice-Chancellor, The Open University, UK
- 1984 – 1990: President, Laurentian University, Canada
- 1980 – 1984: Vice-Rector, Academic, Concordia University, Canada
- 1978 – 1980: Vice-President, Athabasca University, Canada



Educational Background:

- 1996: Master's degree (Educational Technologies), Concordia University, Canada
- 1969: Doctoral degree (Physical Sciences), University of Paris
- 1965: Undergraduate degree (Metallurgy), Oxford University

Born: 1942

On behalf of my colleagues in UNESCO's Education Sector around the world it is a pleasure to welcome you to this Round Table discussion on Education and Knowledge Societies. UNESCO believes that our aim must be to evolve, in reality not in mere terminology, from information societies to knowledge societies. Then the ultimate goal for the whole world is to become a learning society with the purpose of bringing peace, prosperity and fulfillment to the humankind. We are still in the early stages of this process – indeed, we often talk of information and communication technologies (ICTs) as new technologies. For this reason I am less exercised than many observers about the digital divide. While the richer countries may be better equipped than the poorer countries, all are at much the same stage when it comes to using ICTs in education. Various parts of UNESCO's Education Sector, notably our Institute for Information Technologies in Education in Moscow and our Regional Bureau for Education in Bangkok, are following these developments closely with the intention of allowing all countries to share the benefits. I hope that you enjoy the discussions at the Round Table.

KINELEV, Vladimir

Director, UNESCO Institute for Information Technologies in Education
(UNESCO IITE) (1998 – Present)

Professor
Academician of the Russian Academy of Education
Academician of the Russian Academy of Engineering



Field: Information and communication technologies in education, educational administration, space technologies

Professional Career:

- 1996 – 1998: Minister of General and Professional Education of the Russian Federation
- 1993 – 1996: Chairman of the State Committee of the Russian Federation on Higher Education, Vice-Chairman of the Russian Government
- 1990 – 1993: First Deputy Minister of Science, Higher Education and Technologies of the Russian Federation
- 1972 – 1990: Assistant Lecturer, Assistant Professor, Professor, Vice-Rector, Moscow State Technical University n.a. Bauman

Educational Background:

- 1982: Doctoral degree (Dr. Sc. – Space Technologies), Moscow State Technical University n. a. Bauman
- 1972: Doctoral degree (Ph.D. in Technical Sciences), Moscow State Technical University n. a. Bauman
- 1968: Master's degree (Space Technologies), Moscow State Technical University n. a. Bauman

Born: 1945

EDUCATION FOR EVOLVING SOCIETIES

'Education is a truly special State, the influence of which cannot be defined by single person, and even national authorities are unable to delimit its frontiers: the sphere of its influence is immense, it is infinite...'

Ch.M. Talleyrand

Globalization and the Main Trends in Education for Evolving Societies

The World Summit on the Information Society is taking place in the period marked by an active phase of intensified globalization process which includes not only economics and finance, but virtually all spheres of human activity. The development of new information and communication technologies transgresses the territorial borders of national states and makes geographical boundaries inadequate as delineations of jurisdictions. These technologies constitute a truly international and global realm of activity, where it is practically impossible to successfully impose national laws and regulations. Information and communication technologies based on the Internet, telecommunication networks and intelligent computer systems open up new and exciting opportunities for new generations and for dissemination of knowledge across national borders. They give us an opportunity to speak about global knowledge above and beyond local and indigenous contexts. It is cross-cultural, characterized by the diversity of sources, grounded in global information infrastructure, and depends on the following global domains of human activity: science and technology; politics and economics, humanities, social sciences, culture and education.

Globalization process coincides with a fundamental transition to the information society – a new worldwide community based on information. Evolvement of the information society entails dramatic changes in production and business, as well as in a broader social context. Rapid development of the information sphere of society is drastically altering the structure of work and employment, and produces new occupations and jobs. More and more people are being drawn into the information society as learners, workers and consumers. People all over the world have high hopes that new technologies will lead to healthier lifestyles, greater social freedoms, increased knowledge and more productive livelihoods. It will not be an exaggeration to say that future generations will face the challenge of adjusting to a new social environment, where information and scientific knowledge will replace matter and energy as pivotal factors and will define both society's strategic potential and prospects for its development.

Scientific and technical progress and the global dissemination of technologies developed in the most advanced countries of the world constitute one of the main arguments in favour of the leading role played by education in the 21st century. The level of technological development is indicative nowadays not only of the economic power and living standards of a particular country, but also of the place and role of this country in the global community and the scope and prospects of its economic and political integration with the rest of the world. At the same time, the level of development and usage of modern technologies in different countries is determined not only by the development of their material resources, but, to a large extent, by the degree of society's ability to produce, consume and apply new knowledge. These developments, in turn, are closely linked to the level of educational development. All these processes are largely driven by information and communication technologies, where scientific knowledge and information increasingly determine new patterns of growth and wealth creation and open up possibilities for more effective poverty reduction.

In spite of the fact that at the turn of the century literacy for all – children, youth and adults – is still an unaccomplished goal and an ever-moving target, all of us should concentrate on the next steps towards creating information society. New social demands and the new world around us shaped by the new information technologies and models of action call for New Literacy for the Information Society. As a substitute for the old meaning of basic literacy (reading, writing and arithmetic), new ones may be presented as finding information by searching written sources, observing, collecting, recording, etc.; communicating in hypermedia and involving all types of information and media; designing objects and actions; creating hypermedia essays on the basis of all types of information technologies.

The great saga of human knowledge contains pages that are unique, and I would first list among them those, which contain examples combining the potentials of the human mind and technology. The invention of printing raised the institutions of general education to a previously unattainable height. It is the first and perhaps the highest ever stage in the information revolution. But I presume that it will not be an exaggeration to contend that considering the amazing standards and prospects of application offered by information and communication technologies in education, we are on the threshold of the next stage of the educational revolution, which will entail a dramatic shift in all spheres of human existence.

Education for the Information Society

The Report of the International Commission on Education for the 21st Century 'Learning: The Treasure Within' submitted to UNESCO emphasizes the crucial role of fundamental and thorough knowledge in allaying some major tensions which, although far from being novel, will pose a formidable challenge in the 21st century. These tensions include: the tension between the global and the local, the universal and the individual; between tradition and modernity. The tension between, on the one hand, the necessity of competition, and on the other hand, the concern for equal opportunities; the tension between the extraordinary expansion of knowledge and human beings' capacity to assimilate it.

Leaders of virtually all countries striving to prepare their citizens for adequate response to the challenges of the 21st century have professed their desire to transform their countries into learning economies and learning societies, inasmuch as the information society needs competent and knowledgeable citizens. The age of new information and communication technologies does not eliminate the most difficult problems that the world of education is facing today and that have to be resolved irrespective of whether the new technologies are adopted or rejected. Nevertheless, training and development, social and professional requirements, globalization of communication, economy, and political projects for building a new society, rely heavily on the introduction of information and communication technologies into education. The alternative is to lag behind these developments chronically and, in effect, to fail to meet the challenges of the 21st century.

Presently, most governments put tremendous efforts in modernizing educational systems in their countries on the basis of information and communication technologies viewed as a key to such modernization. Some countries consider information and communication technologies as a vital component in upgrading the quality of education through changes in curricula, introduction of training in new skills and a wider scope of knowledge. In other countries information and communication technologies are used mainly to facilitate access to education by various population groups or for a narrower purpose of assisting self-education through programmes broadcast on radio and television. Yet other countries emphasize their reliance on technologies as a means of transforming educational environment or satisfying specific needs of different categories of students.

Education for emerging information society requires information and communication technologies to meet large-scale learning needs arising from social and economic developments. For the first time in history, information and scientific knowledge are not simply means of improving society, but are becoming the main products of the economy. Moreover, knowledge is the main asset and the main product of the information society upon which continuation of economic well-being and societal development depends. Information and communication technologies are at the core of this development. Information and communication technologies and the information society are both dealing with creating, acquiring, and sharing, disseminating, delivering, aiding and appreciating knowledge. Information and communication technologies serve as the means of providing access to learning and assisting in continuous learning process necessary for successful integration of all population groups into information society.

Education in the Information Society

Learning issues are of central importance to the evolving information society. Developing information and communication technologies create an environment of rapid and ongoing changes. The current pace and magnitude of changes breaks the traditional framework of historical gradations. For the first time in the history of our civilization, generations of products and ideas come and go faster than generations of people succeed one another. Even in private life, change tends to oust continuity and stability. Moreover, change reveals itself through previously unparalleled diversity, making it impossible to define our era through any single event or development. This environment demands a fundamentally new approach to learning. Individuals need new skills and understanding; they must develop the ability to continuously improve these skills and understanding. In other words, humanity must embrace and promote a culture of lifelong learning. New information and communication technologies exceed the traditional framework of the learning process. Learning can no longer be viewed as a ritual that one performs only in the earlier part of life. Information and communication technologies are being used to cross the barriers of age, time and space, bringing lifelong learning to all. People of all ages, in all places and in all different environmental contexts are learning all the time. Therefore, regardless of what activities they are performing – they comprise the learning society.

The amazing standards and prospects of applicability offered by information and communication technologies in learning and teaching processes show that humanity is on the threshold of a new stage of educational revolution which will entail a dramatic shift in all spheres of human existence. These circumstances and new social demands, the new world community shaped by the new information and communication technologies and activities call for a new literacy in the information society. The new literacy requires, in principle, creating of new technology for obtaining scientific knowledge, new pedagogical approaches and new school curricula and methodology for teachers and students. All of the above should stimulate students' intellect and creativity and enable them to develop a holistic view of the world that would allow them gaining a foothold in the information society. Thus, it will be a mistake to think that applying new information and communication technologies would automatically raise the quality of education. In order to exploit effectively opportunities provided by information and communication technologies, such fields as computer psychology, computer didactics and computer ethics should be better developed, explored and employed by educators. It is worth keeping in mind that despite the variety of information sources and teaching technologies transforming information into knowledge, there is only one way to convert knowledge into education. This conversion takes place in human consciousness. It is the most interesting and mysterious interaction between the psychic space and cyberspace. A human personality emerges and develops as a result of this interaction. It allows us to contend that no two educations evolving as a result of this interaction can be treated as completely congruous, inasmuch as no two human personalities are the same because each individual is unique. Establishing human personality as a priority was the main accomplishment of the past century. Maintaining human personality as a priority is the main imperative of the 21st century.

Towards Knowledge Society

It should be emphasized that the development and transformation of the information society into the knowledge society can be accomplished only on the basis of fundamental, scientific knowledge that, in its turn, requires a 'fundamentalization' of

education content based on fundamental natural, social and human laws; reflecting scientifically grounded trends in their development and interdependence; shaping human ability to use these objective laws effectively for the benefit of society and nature. I would compare the future content of education with 'Ariadne's clew' that may lead an individual out of the labyrinth of daily demands and pressures.

The main reasons which stipulate the necessity of fundamentalization of education content, in my opinion, can be divided into two groups. The first group of issues refers to the global problems in the evolution of human civilization.

It may be relevant to consider the fact that in the process of their development, individuals, societies, the world community, and civilization as a whole reveal their essential or fundamental characteristics. In this context, it is important to set up on the basis of scientific picture of the world, an educational system, which could be able to identify and transfer to students the most recent scientific developments. Moreover, students' attention should be drawn to the most essential – fundamental, stable and lasting knowledge that lies at the core of the currently available scientific picture of the world. This includes the world of outer space, the world of a human being and society, and the world of human civilization as well as fundamental global processes unfolding therein.

There is, however, another group of reasons pointing to the need of fundamentalizing education content. It is derived from an understanding, increasingly shared by the world community, that an educated personality has the top priority in the knowledge society. In line with modern thinking, to nurture a broadly educated personality a number of interconnected problems should be solved. Firstly, it is crucial to harmonize an individual's relations with nature by helping him/her obtain a scientific picture of the world. Secondly, it is important not to lose sight of the social nature of a human being, and therefore harmonious socialization should be accompanied by cultural assimilation through the study of history, literature, art, law, philosophy, and economics. Thirdly, modern people live in a highly saturated informational environment. So, the task faced by the educational system is to teach students how 'to navigate' through this environment. And, last but not least, it is necessary that an individual should achieve a kind of inner balance, or harmony. Thus, the task of both solving the global problems of humankind and meeting the vital needs of an individual, points to the idea of fundamental education content.

The following question would seem to be relevant: What lies at the basis of fundamental education content? Apparently, the emphasis is on fundamental sciences. However, before we get to the issue of fundamental education content, it appears necessary first to develop a holistic perspective on fundamental sciences per se. The fragmentation and differentiation of sciences in the 20th century have reached a point where specialists working in different areas of what used to be a unified field of science no longer understand one another. So, the task of scientists and educationalists is to identify the sum total of each fundamental science, then try to reveal the internal unity of natural sciences as a whole and the entire body of human sciences and, finally, at the next stage, to synthesize the principles of holistic fundamental education content.

It is worth mentioning that scientific knowledge cannot be automatically assimilated by students. Nor can it be simply passed on by the teacher to an inactive student, for it is generated by the student himself or herself as a result of his/her inner creative activity. It is a product of evolution and self-organization of human intelligence. The teacher's role is to awaken the student's intellect, to shape an individual's creative potential and holistic world outlook, to show him or her models of holistic thinking.

Thus, the educational paradigm for knowledge societies can be defined as a logically connected triad 'From holistic world to holistic knowledge, and via it to a holistic personality'.

The large scope of the processes of building knowledge societies, a growing role of scientific knowledge, fundamental education and information in shaping the present and future image of humankind prompt us to search for analogies in the previous centuries.

As Ecclesiastes said:

'Is there any thing
whereof it may be said,
See, this is new?
it hath been already of old time,
which was before us.'

Looking back and assessing the achievements of the past centuries, I shall venture to single out one very important thing: the concept of relativity formulated by Albert Einstein, Sigmund Freud and Karl Marx for – respectively – physical, mental and social domains. Brilliant insights of these scholars gave humankind the possibility to realize that the world is not what it appears to be, that we cannot trust our empirical perception of space and time, of good and evil, of law and justice, and of the nature of people's social behavior. They made people realize that natural laws and intellectual concepts reflect not only the objective reality of the physical world, but the realities of the social world as well. Unfortunately, the past century has given us many examples of how these fundamental truths can be overlooked, which caused severe damage to nature, the world of living things and humankind per se.

All of the above confirms that humankind is still at the very beginning of a long and difficult road towards the knowledge society, and only by pulling together intellectual, technological and economic resources can we reach the end of this road.

ICTs and Quality of Education

It goes without saying that emergence and successful development of the evolving societies is not possible without improving quality of education of individuals and consequently improving quality of education of a given society as a whole. In the absence of common formal definition of the term 'quality' in education I believe that it is possible to include into this definition such abilities of an individual as: keeping abreast with the modern ideas and discoveries in the areas of science and technology; acquiring skills required by the latest technologies and the market; developing his or her resourcefulness through self-education. So, scientific knowledge and professionalism as products of quality education should provide a successful participation of an individual in the development of the evolving societies.

In my view, necessary and sufficient conditions can be identified in the process of improving education quality that allows meeting this important final objective of education. The necessary conditions would include such educational components as well equipped class rooms and lecture halls, highly professional administrators in managing positions at the educational institutions, highly qualified teaching personnel, easy access for students and teachers to quality textbooks and professional literature, as well as to modern teaching aids and supplementary information.

The sufficient conditions are related to a person's ability to transform knowledge and skills received into education, i.e. into customized system of ethical, cultural and professional values, and also to the ability to apply this system in various areas of intellectual and practical activity. The quality of education in my view is defined precisely by a person's ability to meet the demands of contemporary society.

The unique role played by information and communication technologies in improving education quality is based on their ability to effectively facilitate the fulfilment of both necessary and sufficient conditions for receiving quality education.

Modern level of ICT development significantly broadens opportunities available to students and teachers for gaining access to educational and professional information; improves operational ability and management effectiveness at specific educational facilities and the educational system in general; facilitates integration of national information educational systems into the world network; considerably assists in accessing international information resources in the areas of education, science and culture.

At the same time it is worth mentioning that the present level of development of information and communication technologies permits their successful application in education to release the creative potential of student owing to more efficient organization of students' cognitive activities through the use of computers with their very important didactic characteristic of individualizing the classroom work without disrupting its entirety, via programmed and adaptable curricula.

New information and communication technologies brought about dramatic changes in the educational technologies of obtaining knowledge, converting knowledge into education and applying education in practice. Moreover, when we speak about the role played by information and communication technologies in education, we should proceed from the understanding that these technologies not only facilitate educational opportunities but assist an individual in perfecting his/her perceptions, too. Modern information and communication technologies provide learners with richer information objects such as images, videos, complex structures of knowledge and their combinations, available via the Internet or other intelligent computer networks. Information and communication technologies radically extend possibilities for visualization, including

visualization of the invisible, visualization in changed colours and shapes. Colourful images of architecture, sculpture or painting, grouped thematically and accompanied by well-written texts and beautiful music have a strong emotional effect on the student, develop his or her artistic taste and at the same time enable the student to learn more about culture, art and nature.

It is worth mentioning the words said by O. Wilde: 'For the good we get from art is not what we learn from it; it is what we become through it'.

At the same time we should take into account that parallel to education as a means of preparing students to life, cyberspace, as another educational milieu, is developing. The seminal works of Vygotsky, Piaget and Bruner gave rise to the term interiorisation of physical objects, which suggests our creating 'psychic' equivalents of the latter as 'conceptual' models to be further used to construct variants of our own internal reality or virtual realities. Cyberspace prompts a reverse process, which could be called exteriorisation: models of the physical world constructed in the human mind are let out into cyberspace. So, we should proceed from the understanding that it is necessary to develop in an individual a particular perception of his or her habitat, which comprises both: objects of the physical world and the ideas of these objects in the human mind, as well as the system of ideas in information space. Thus, information and communication technologies do not merely enhance intellect; they designate new dimensions of the human mind, produce an orderly system of a new global culture and open up vast and exciting perspectives of their use in improving quality of education.

It should also be stated that if the first approach to human interaction with the environment arose through many centuries of our species' evolution, the second approach has introduced amazing changes into human consciousness in a brief period of just a few decades. We can only guess what the nature of these changes is, what is the scope of their impact and future implications. So, I can only hope to be right in suggesting that one of the most complicated problems that have to be solved in the evolving societies is the problem of a human being in the changing world. Today, a human being has become the main factor in development of civilization as well as its main risk factor. Which of the two will prevail depends largely, if not decisively, on education and educational institutions.

Learning without Frontiers

The present level of ICT development offers a real opportunity for creating an educational milieu without frontiers. I find it is necessary to note that, in my view, there are two main obstacles that a human being should overcome in order to create an educational environment without boundaries: geographical distances and varying capacity of different people to transmit and perceive the same information, particularly of people with special needs, who, owing to various reasons, are unable to obtain education through standard methods. Due to rapidly developing global system of distance learning, new information technologies, regardless of the physical distance ensure the kind of direct and interactive communication between the teacher and the student that has always been the main characteristic and undeniable advantage of full-time education. There is no doubt that in the near future, the development of information and communication technologies will result in a broad dissemination of digital libraries, laboratories with remote access, open virtual universities and global virtual campuses as the basis for a universal educational and scientific environment serving the world community. New information technologies as well as the man-made intellectual environment have the capacity to give back, at least in part, to many people the kind of abilities and communication possibilities that they may have been deprived of by nature, environmental disasters, military conflicts, or human violence. I am confident that this is a two-way road since, after the barriers of interhuman communication are demolished, the so called 'ordinary people' will be able to obtain a broader understanding of the nature of a human being and the surrounding world. Probably, this is the major humane tendency connected with the use of information and communication technologies in education and other spheres of practical and intellectual human activities.

Ethical, Psychological and Legal Issues

The penetration of information and communication technologies into educational settings requires in principle, the formulation of new ethical, psychological, legal and moral aspects of applying such technologies to learning. New information and communication technologies offer wonderful opportunities to reach out to our fellow human beings, but the darker side of human nature finds its way into cyberspace, too. The full spectrum of reprehensible or outright debased moral behaviour is represented online: aggression, violence, crime, deception, brutality, rudeness and so on. The global nature of new information and communication technologies not only opens up broad opportunities for dissemination of knowledge, but also increases the danger of conflict between values and standards espoused by different cultures. For such a global information community



to become a reality, an effective mechanism of information exchange should be developed to inhibit the erosion of national and cultural identity. The past century has clearly demonstrated that in the great history of times and peoples, no culture or nation is small – only together they constitute the supreme value of the world civilization and the basis for the sustainable development of the world community.

UNESCO's Mission

In the new millennium, information and communication technologies will provide tremendous opportunities to narrow the socio-economic development gaps between communities and nations. They serve as an opportunity for the increased exchange of knowledge and know-how, for the promotion of intercultural dialogue, and for greater understanding among nations. Information and communication technologies give all nations a new chance that should not be missed. However, for these purposes, the key problems of the digital divide that exclude entire groups and countries from the potential benefits of digital opportunities in networked-knowledge societies and lead to a global gap between information 'haves' and 'have-nots' should be addressed urgently. Main UNESCO's programme document, namely, Medium-Term Strategy 2002-2007 stresses that bridging the digital divide between developing and developed countries and within countries thus becomes a prime strategic challenge throughout UNESCO's activities. This entails activities aimed at strengthening national capacities and professional skills of individuals, creating a new content of education, broadening access to information, fostering scientific research and sharing scientific knowledge and information through networking and the communication media and information systems. It is UNESCO's mission to promote the free flow of information, knowledge and data, to encourage the creation of diversified education contents and to facilitate equitable access to information and the means of sharing scientific knowledge while at the same time giving attention to institutional capacity-building. The Organization seeks to encourage international debate and reflection regarding the impact of globalization on access to information services and communication processes. UNESCO strives to foster the application of information and communication technologies in education at all levels, to reinforce national potential in ICT application for the development of education, to contribute to peace and human development in the globalization era through education, the sciences, culture and communication. As Koichiro Matsuura, UNESCO Director-General, noted that 'The field we have yet to explore is a broad one, and there will no doubt be a long way to go, as there is for any standard-setting action, before we arrive, in each of the areas so requiring, at instruments meeting with the approval of all. I am thinking in particular of the promotion and use of multilingualism and universal access to cyberspace, where the debate revealed that we had still to amplify our reflection and needed to engage in further consultation.' At present there are all the reasons to hope, that the endeavours of UNESCO in conjunction with political guidelines of UNESCO Member States and on the basis of international cooperation will be able to forward creating of necessary conditions for sustainable development of the evolving societies.

CORNU, Bernard

Director, La Villa Media – the European Residence for Educational Multimedia (2001 – Present)

Vice-Chairman of the IITE Governing Board (2003 – Present)

Field: Information and communication technologies and education, teacher training, educational policies



Professional Career:

2000 – 2002: Advisor at the Ministry of Education, France

1990 – 2000: Director, University Institute for Teacher Education (IUFM), Grenoble, France

1991 – 1994: President of the Conference of IUFM Directors

1988 – 1990: Head of MAFPEN (in-service training of education personnel), Academy of Grenoble, France

1984 – 1986: President of the Assembly of the Research Institute on Mathematics Education (IREM), Grenoble, France

1982 – 1986: Director, Research Institute on Mathematics Education (IREM), Grenoble, France

1969 – 1999: Assistant then Lecturer, University Joseph Fourier, Grenoble, France

Educational Background:

1983: Doctoral degree (Mathematics, Informatics), University Joseph Fourier, France

1970: Masters' degree (Mathematics), University Joseph Fourier, France

1968: Undergraduate degree (Mathematics), University Joseph Fourier, France

Born: 1948

PREAMBLE TO THE ROUND TABLE DISCUSSION

Information and Communication Technologies (ICTs) have brought profound changes in society and education. They are so huge that new concepts of the society appeared: information society, communication society and knowledge society. The changes are not only technological: they address the fundamental values and concepts of societies and raise new essential questions. The aim of the Round Table is to consider these questions and try to formulate some core principles and concrete recommendations for Education in Knowledge Society.

This must be done taking into account the reflections already led at the international level, particularly, by UNESCO. Speaking about the society we need to state and agree on core values, the values of humanism, peace, equal dignity of human beings, the values of solidarity – these values our countries share and want to promote. We could take as a basis for our deliberation some main principles and documents.

Education for All: Access and Quality

First, the affirmation of “Education for All” is to be studied. UNESCO and its Member States committed themselves to the promotion and development of “Education for All”, considering that education is a major need for humanity, a major investment to prepare the future of humanity, that all human beings have the right to receive education, and that all countries have the duty to provide education for all. Of course, a strong and efficient international cooperation is needed in this respect. “Education for All” includes two main aspects: access (make education accessible for all) and quality (provide a quality education for all). Access and quality must be aimed at simultaneously; it would be a mistake to decrease quality in order to improve access.

“Four Pillars”

There may be difficult debates about what education is. Is it just the transfer of certain knowledge? Is it more linked to the development of human beings? We can take as a basis the Report to UNESCO by the International Commission on Education for the Twenty-first Century, chaired by Jacques Delors (“Learning, the Treasure within”, UNESCO, 1996). It describes the “four pillars” of education: *“If it is to succeed in its tasks, education must be organised around four fundamental types of learning which, through a person’s life, will in a way be the pillars of knowledge: learning to know, that is acquiring the instruments of understanding; learning to do, so as to be able to act creatively on one’s environment; learning to live together, so as to participate and cooperate with other people in all human activities; and learning to be, an essential progression which proceeds from the previous three. Of course, these four paths of knowledge all form a whole, because there are many points of contact, intersection and exchange among them”.*

The Dakar Framework for Action

The “Dakar Framework for Action”, adopted during the World Education Forum, in Dakar, Senegal, April 2000 stated some principles in order to enhance “Education for All”: *“...we hereby collectively commit ourselves to the attainment of the following goals: [...] ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.”*

And the framework gives some hints for strategies, taking into account ICTs :

“Harness new information and communication technologies to help achieve Education For All goals:

- *ICT must be harnessed to support EFA goals at an affordable cost. These technologies have great potential for knowledge dissemination, effective learning and the development of more efficient education services. This potential will not be realised unless the new technologies serve rather than drive the implementation of education strategies. To be effective, especially in developing countries, ICTs should be combined with more traditional technologies such as books and radios, and be more extensively applied to the training of teachers.*
- *The swiftness of ICT developments, their increasing spread and availability, the nature of their content and their declining prices are having major implications for learning. They may tend to increase disparities, weaken social bonds and threaten cultural cohesion. Governments will therefore need to establish clearer policies in regard to science and technology, and undertake critical assessments of ICT experiences and options. These should include their resource implications in relation to the provision of basic education, emphasising choices that bridge the ‘digital divide’, increase access and quality, and reduce inequity.*
- *There is a need to tap the potential of ICT to enhance data collection and analysis, and to strengthen management systems, from central ministries through sub-national levels to school; to improve access to education by remote and disadvantaged communities; to support initial and continuing professional development of teachers; and to provide opportunities to communicate across classrooms and cultures.*
- *News media should also be engaged to create and strengthen partnerships with education systems, through the promotion of local newspapers, informed coverage of education issues and continuing education programmes via public service broadcasting.”*

IFIP Montreal Youth Declaration and Vilnius Declaration

More recently, two major texts provided key principles and stated recommendations:

- The participants in IFIP World Computer Congress, Montreal, Canada, 2002 adopted “Youth Declaration”. It highlights the importance to sensitize authorities and the society about the necessity to include the development of ICT infrastructures and ICT skills for young people as a high priority in policies and agendas. It affirms the commitment to ensure a youth-oriented digital inclusion. A set of concrete recommendations is then provided.
- The participants in First World Information Technology Forum (WITFOR), in Vilnius, Lithuania, 2003 adopted “Vilnius Declaration” inviting national governments to give priorities to national socio-economic development plans to create ICT infrastructures, urging national governments to guarantee the application of the principles of freedom of expression and privacy, ensuring a continuous process of education on the rights of citizens as a fundamental element of poverty alleviation, facilitating knowledge and information sharing, encouraging international cooperation, empowering all communities through programmes aimed at developing literacy, including ICT literacy, etc.

World Summit on the Information Society

Ministerial Round Table on “Towards Knowledge Societies”, Paris, October 2003 adopted a communiqué, reminding of some fundamental principles for the development of equitable knowledge societies: freedom of expression; universal access to information and knowledge; respect for human dignity and cultural and linguistic diversity; quality education for all; investment in science and technology; understanding and inclusion of indigenous knowledge systems. This communiqué must be considered an essential input to the work of the World Summit on the Information Society (WSIS).

Finally, two documents gather a set of principles and recommendations, to be addressed during WSIS: “Draft Declaration of Principles”, and “Draft Plan of Action”. The declaration of principles recognizes, that education, knowledge, information and communication are at the core of human progress, endeavour and well-being. A vision of Information Society for all is presented, and access to knowledge is quoted as a key principle. The plan of action gives concrete recommendations: several address access to knowledge and capacity building: *“Everyone should have the necessary skills to benefit fully from the Information Society. ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning, encompassing people that are outside the formal education process, and improving professional skills.”* The plan recommends to *“develop national policies to ensure that ICTs are fully integrated in education at all levels, including in curriculum development, teacher training, institutional administration and management, and in support of the concept of lifelong learning.”*

From Information Society to Knowledge Society

Some years ago, we were talking about computers and informatics, and their influence on learning, teaching, and education. The new technological tools brought new resources for the teacher, and were considered a supplementary aid for teaching, like other technologies had been before. Information technologies then developed processing digitalized information. At the same time, communication technologies transporting digitalized information, developed as well; both merged leading to new tools known as information and communication technologies. The concept of Information Society appeared: information has become a valuable good, that one can buy and sell, and information has acquired a major place in economic and social matters. The organization of societies evolves being based more and more on information and access to information. Information is very easily accessible, in any place, at any time. But new questions appeared: how to sort and categorize information, which is abundant and untidy? How to evaluate and assess information, how to distinguish between accurate and wrong information? New ethical questions about information, access to information, and distribution of information were raised. Information is like raw materials: it must be processed before used.

Information is not knowledge. Information, even if it is digitalized, interactive, dynamic, has no human dimension. The next step, the major step, is now to move toward Knowledge Society. Information Society is based on technology; Knowledge Society is based on human beings.

Knowledge is a good that can be stored, circulated, exchanged. But it is an evolving good, continuously changing and enriching. Knowledge has a human dimension; it is linked with what human beings do and think; knowledge is created and developed in and by human beings. Knowledge is both an individual and collective matter. Knowledge is linked to culture and technology; there exists not one knowledge society, but, certainly, many knowledge societies. Some have a lot of knowledge and can produce knowledge; others are poorer; there are conflicts about knowledge, territories, and borders. In knowledge societies, our geographical and political borders are no longer accurate, new borders are appearing, as well as new territories, new powers, and new conflicts.

Knowledge societies must not be reduced to knowledge economy: it is not only a matter of buying and selling knowledge, but, more fundamentally, to analyse the social changes due to the advent of knowledge societies.

We are used to describe knowledge in terms of subjects, disciplines: mathematics, history, literature, languages, etc. But knowledge is getting more and more composite; the questions addressed in society, that knowledge must keep answering, are more and more transverse and complex. Edgar Morin has shown that the necessary knowledge cannot be listed in the terms of disciplines, and he has suggested “Seven complex lessons in education for the future”: detecting error and illusion, principles of pertinent knowledge, teaching the human condition, earth identity, confronting uncertainties, understanding each other, and ethics for the human genre.

Knowledge and Education

So, new challenges are raised for Education in the knowledge societies: transforming information into knowledge, identifying accurate knowledge, transmitting knowledge ...

Accessing knowledge takes new forms. Knowledge is no longer accessible only in books and in the teacher's head! Knowledge is now available in many different places, and attainable from any place, at any time. Education has a new role in terms of making knowledge accessible for pupils, and guiding pupils in getting knowledge. However, it is not enough to access knowledge; knowledge must be actually acquired. Since there are profound changes in the knowledge, there are changes in learning and acquiring knowledge. These changes we must try to identify.

There is, of course, a strong link between knowledge and education. Education is the main process dealing with knowledge. So, in a knowledge society, education takes a central role and is a major stake for future and evolutions. Education takes the characteristics of an economical activity in such a society. But it is a political and social responsibility of decision-makers to ensure that everyone can access and acquire knowledge. The question of education as a public service is raised in a new form, in a context where knowledge is a good and education — an economic activity.

Education for and in Knowledge Societies

At the Round Table, we will address two main aspects of education and knowledge societies: education FOR knowledge societies, and education IN knowledge societies.

Education for knowledge societies, because knowledge societies expand progressively, and we must educate pupils and students for this kind of society: preparing the knowledge societies, preparing citizens of knowledge societies, preparing people to understand knowledge societies and to act and behave in such societies. Education must take into account the main trends in the changes toward knowledge societies, identify the main challenges to overcome; educational policies must be designed in the context and framework of knowledge societies. Education and educational policies must follow the changes and evolutions, as well as anticipate and, therefore, help decision-makers and the civil society impact the evolutions to master them.

Education in knowledge societies, because in such societies, knowledge has changed, access to knowledge is different; learning in knowledge societies, and teaching in knowledge societies, include new components, new concepts, new pedagogical approaches, and need new resources and new tools.

Networks

Knowledge societies are networked societies. We are used to hierarchical structures, to pyramidal or tree-type organizations. Knowledge societies are structured by networks. A network is very different from a pyramid or a tree: there are edges and nodes, the edges linking the nodes; from one node to another one, there are several possible paths. There may be lots of sub-networks. There is no natural hierarchy, but new types of hierarchies may appear. The Internet is the clearest example of such a network. One can circulate in a network, but this needs to be mastered, tools and rules are necessary. Accessing information is, mainly, made through networks now. The network structure of such societies will, certainly, have huge consequences on the organizations. A school, an educational system, cannot stay organized as hierarchical and pyramidal structures in a society where knowledge and people are networked. This can lead to profound and unexpected changes in our societies.

Competencies

Knowledge societies need new types of competencies. We have already mentioned that the educational needs of societies can be considered through the four “pillars” of education: learning to know, learning to do, learning to live together, learning to be. In knowledge societies, knowledge is not static, it evolves and it is permanently enriching. Education cannot be reduced to the transmission or acquisition of a set of definite knowledge; it would be soon obsolete. Learning to learn is a necessary ability that education must provide. It is the content as well as the processes that education must transmit. The ability to evolve, to adapt, is essential in knowledge societies; education must take it into account. Knowledge societies are lifelong learning societies, and education must prepare to lifelong learning.

Collective intelligence

Knowledge societies need virtual communities and collective intelligence. We were used to educational systems aimed at acquisition of individual knowledge and development of individual intelligence. But more and more, society needs collective kinds of competencies. In knowledge societies, knowledge and processes are mainly collective. This requires collaborative work, teams and communities. The concepts of virtual communities and collective intelligence are essential in knowledge societies. Virtual communities are communities of real human beings made possible and activated through information and communication technology tools; ICTs implement new kinds of communities, enable to overcome usual barriers and borders, create new communities who can communicate, work together, act together. Collective intelligence is not a mere sum of individual ones: there is an “added value”, a kind of intelligence, which is communal, which no one could have alone.

School in Knowledge Societies

When we speak about knowledge societies, we mean that we do not want to reduce them to technology societies or information societies. The role of schools and education is essential in knowledge societies. Of course, education must focus mainly on knowledge, not on technology. Every educational policy must address knowledge, not only technology and communication. The role of school in knowledge societies raises new questions: schools for the knowledge society, schools in the knowledge society. However, information and communication technologies change the status, mission, role, and action field of schools. What will education be, and what will the school be in future, in knowledge societies? OECD has published a very interesting study about the school of the future, imagining six different scenarios. Such scenarios are not the guessing what the future will be, it makes us aware that there is no fatality in the future: we must decide where we want to go and act within the appropriate parameters in order to master our future, the future of schools. The scenarios are of three types:

1. Attempting to maintain the status quo:
 - Bureaucratic school systems continue.
 - Teacher exodus; the “meltdown” scenario.
2. Re-schooling:
 - Schools as core social centers.
 - Schools as focused learning organizations.
3. De-schooling:
 - Learning networks and the network society.
 - Extending the market model.

Such scenarios can help policy-makers and decision-makers design appropriate policies for the future. They can help anticipate, not only follow!

The question of anticipation is a crucial one. Technology evolves very quickly, and changes are so fast that most of the time we just try to catch up with our delay, to adapt our old strategies and habits to the new tools and technologies. It is not enough, and may even be wrong. There is a need to re-think the main paradigms of education in knowledge societies. Innovation must not only follow the evolutions of technology and the evolutions of society; it must anticipate, be pro-active.

Pupils and Learning in Knowledge Societies

The pupil and the student are at the centre of education in knowledge societies. The pupil is the learner, but cannot be reduced to the one who acquires knowledge. The pupil is a citizen in the knowledge society, and the pupil must be prepared and educated as a citizen of the knowledge society. We have to reflect on this new “knowledge citizen”, so that the fundamental values of the knowledge society can be described and respected: equity in access to knowledge, solidarity, equal dignity of human beings, etc. The relationship between individuals and society has new characteristics in the knowledge society, particularly because of virtual communities, of collective intelligence. We have to invent a citizenship for knowledge societies.

Lifelong learning is an important component of Knowledge Society. Since knowledge is at the core of such a society, learning is an essential process, and it must go on all life long. Knowledge societies are lifelong learning societies.

Knowledge societies and ICT make possible and need new learning methods. ICT enables to take into account space and time in education differently; we are not bound to the “same place – same time” aspect of school classes; it becomes possible to have school activities at different times and different places. Distance education does not address only the ones who are in particular situations; it becomes a component of Education for All; we have to invent a good articulation and a good balance between class and distance education activities, in order to improve education and learning.

Teachers in Knowledge Societies

Being a teacher in the knowledge society is a new challenge. Of course, there are new teaching methods, new pedagogies, new tools, and new resources available for a teacher. However, the role of a teacher is changing, and the expectations of society toward teachers are evolving and increasing. The role of a teacher in the learning process is essential. Whatever the technology can do, the teacher remains the only one able to be the necessary human mediator between the pupil and the knowledge. The teaching profession is evolving, because access to knowledge is changing; the teaching profession is evolving in its everyday activities, in the way teachers work with others. Although the core role of a teacher remains, being the one who makes the pupil acquire knowledge, and preparing future citizens.

The role of a teacher is essential; in societies changing quickly toward knowledge societies, the teacher is the main actor, the main agent of the evolution of education. Teacher education is, therefore, fundamental, and a key issue in every educational policy. In the projects, action plans, reforms of education, teacher training is a central issue. It is clear that in order to help countries overcome the digital divide teachers' education is one of the most important tools. Teachers' education has become a major stake in national policies and at the international, worldwide level.

In 1966, the UNESCO Special Intergovernmental Conference on the status of Teachers adopted “Recommendation Concerning the Status of Teachers”. This set of precise and concrete recommendations for action is still very vital, and most of them have not been completed yet. It would be useful to check these recommendations and evaluate to which extent they have been put in action, and to update them, taking into account the new kind of society we live in, and the integration of information and communication technologies. Recommendations concerning the status of teachers in the knowledge society are very useful nowadays!

Need of Policies

So, our Round Table has a lot of questions to address. Our main issue is Knowledge Society: what is it, what are the new trends in such societies; what are the place and the role of education in knowledge societies, how central education is realized in such societies. Education for knowledge societies and education in knowledge societies will be our main topics. We will see that there is a need of strong and concrete policies in order to develop education for and in knowledge societies. It is not a matter of unavoidable evolutions; political choices and decisions must make us master the evolutions and the future. Principles and recommendations for educational policies in knowledge societies will be the main outputs of our Round Table.

We are in the context of globalization. This may have negative aspects, possible risks, and this leads to essential ethical questions about the digital divide, our local cultures, risk of merchandization of knowledge and education. But let us look at it from the positive side: an opportunity to develop a real international dimension in education, a real cooperation between our countries. The knowledge society does not have the same borders our geographical and political countries have; let us take this as a new chance to reinforce international cooperation in a way that respects and enhances cultures and identities.

Knowledge societies need education, and education has a much more important role in such societies. Let us use the opportunity of the knowledge societies to promote and enhance Education for All, give access to education for everyone in the world, in particular, to quality education for everyone.