



INFORMATION AND COMMUNICATION TECHNOLOGIES
FOR THE DEVELOPMENT OF EDUCATION
AND THE CONSTRUCTION OF A KNOWLEDGE SOCIETY
UNESCO IITE SUB-REGIONAL PROJECT FOR SOUTH EASTERN EUROPE
2003-2005

TRAINING SESSION 1

EVENT 1: Training seminar
**RETRAINING OF SCHOOL EDUCATORS
ON ICT APPLICATION
IN SECONDARY EDUCATION**

EVENT 2: Workshop
**INDICATORS OF ICT APPLICATION
IN EDUCATION**

EVENT 3: High Level Seminar
for Decision-Makers and Policy-Makers
**TOWARDS POLICIES FOR INTEGRATING
INFORMATION AND COMMUNICATION
TECHNOLOGIES INTO EDUCATION**



UNESCO INSTITUTE
FOR INFORMATION TECHNOLOGIES IN EDUCATION



STRATEGY for 2002–2003



IITE will continue its activities in three correlated areas – research, training and dissemination – by serving as a laboratory for the application of ICTs in education, as a training centre and as a clearing house, in order to strengthen the requisite national capacities of UNESCO Member States.

RESULTS expected at the end of the biennium

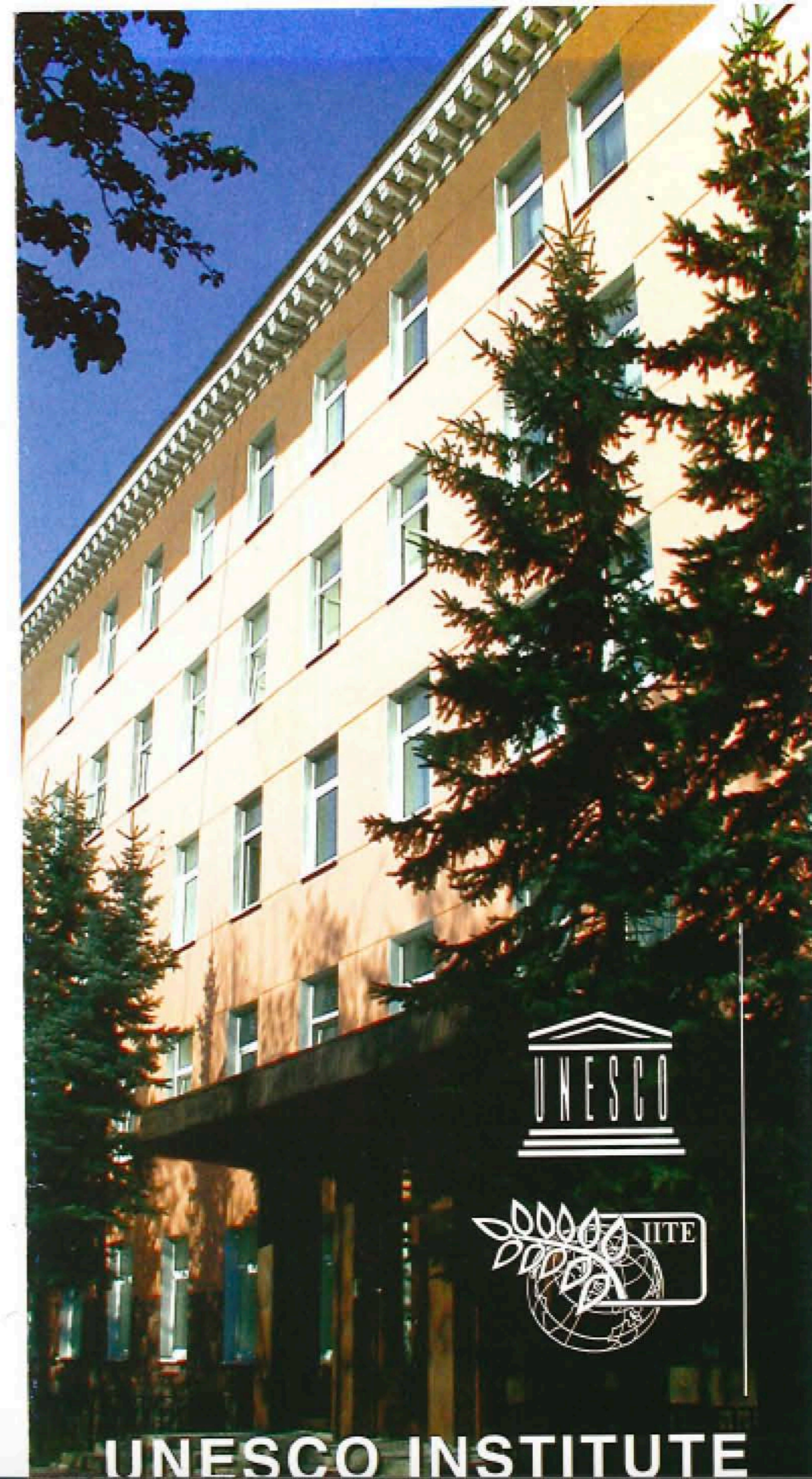
- National capacities in UNESCO Member States for applying ICTs in education strengthened through training of educational personnel, including decision-makers, researchers and teachers.
- Educational personnel trained during three regular training sessions at IITE in specialized aspects of ICTs in education.
- Support to Member States for policy formulation and elaboration/updating national action plans related to the application of ICTs in education.
- Sharing of data and knowledge bases among Member States through the IITE clearing house and the international network of national focal points.
- Training materials on distance education and related aspects.
- Dissemination of IITE publications to a wide audience with a view to raising awareness and influencing policy formulation.
- Initiation of cross-cutting projects on ICTs involving education, science and culture.

FOR MORE INFORMATION or to discuss potential collaboration, please contact:

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UNESCO INSTITUTE

The UNESCO Institute for Information Technologies in Education (IITE) is an integral part of UNESCO. It was established by the General Conference of UNESCO and launched in Moscow in 1997.

The main goal of the Institute is to contribute to the development and implementation of UNESCO programmes in the application of information and communication technologies (ICTs) in education.



APPLIED RESEARCH

IITE Projects for 2002 – 2003

- ICTs in Distance Education
- Indicators of ICT Application in Education
- ICTs in Education for People with Special Needs
- ICTs in Technical and Vocational Education and Training
- Ethical, Psychological and Societal Problems of the Application of ICTs in Education
- ICT-assisted Acquirement of Knowledge in Fine Arts throughout Education
- ICTs in Teaching/Learning of Foreign Languages
- ICTs in History Education
- Digital Libraries for Education
- Education via the Internet
- Designing Information Environment for Education

IITE is participating in the UNESCO Project *Higher Education, Open and Distance Learning Knowledge Base for Decision-Makers*, related to UNESCO's cross-cutting theme *The Contribution of ICTs to the Development of Education, Science and Culture and the Construction of a Knowledge Society*.

TRAINING ACTIVITIES

IITE training activities in 2002–2003 consist of:

- Creating** educational programmes and developing methodological materials on ICT usage in education
- Carrying out** IITE programmes to train and re-train educational personnel from UNESCO Member States
- Holding** regular training sessions, seminars and workshops at the request of UNESCO Member States:

Regular Training Sessions

comprising the **Basic Course** on Elementary ICT Curriculum for Teacher Training and **Specialized Training Courses**, such as:

- ICTs in Primary Education
- Multimedia in Education
- ICTs in Distance Education
- Telecommunication in Education and Internet Educational Resources
- ICTs for Special Education

Training Courses

Each of the above mentioned Specialized Training Courses can be performed as a separate activity

High Level Seminars

for Policy-Makers and Decision-Makers *Towards Policies for Integrating Information and Communication Technologies into Education*

Training Seminars for School Educators

Re-training of School Educators in the Application of ICTs in Education

Seminars and Workshops

on various aspects of the application of ICTs in education

On-Line Seminars

- Multimedia in Education
- ICTs in Distance Education
- ICTs in Language Teaching/Learning Educational Technologies

CLEARING HOUSE

IITE WWW Portal (<http://www.iite-unesco.org>)

Web site contains information on IITE's structure, partners, programme activities and publications. All sections of the web site allow visitors to make requests on particular questions, and send comments and suggestions to IITE directly from the web site.

On-line training tools enriched with instruments for group-work support professional networking by creating worldwide virtual environments for UNESCO Member States educational community.

Information System on Information Technologies in Education database

provides hundreds of hyperlinks to WWW resources in four languages with structured descriptions, associated indexation and query tools. It provides a mechanism for data exchange and supports users with an Internet catalogue on the following themes:

- Policy papers and plans on ICTs in education
- Legislation, curricula and standards
- Organization, administration and financing
- Teacher training
- R&D information
- Statistics
- Internet in education
- Multimedia in education
- ICTs in distance education
- ICTs in education for people with special needs

Publications and Dissemination

Preparation, editing and dissemination of analytical surveys, training, methodological and information materials on ICT usage in education (in electronic and printed form).

IITE intends to publish in 2002–2003:

- 3 specialized training courses
- 5 sets of training support materials
- 2 educational resource CD-ROMs
- 11 analytical surveys

TRAINING SESSION 1

The first training session of the sub-regional project for South Eastern Europe (SEE) *Information and Communication Technologies for the Development of Education and the Construction of a Knowledge Society* is organised in Bucharest, Romania by UNESCO Institute for Information Technologies in Education (IITE). Over 40 educational specialists, policy- and decision-makers from Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Republic of Moldova, Romania, Serbia and Montenegro, Slovenia, Turkey will attend the thematic seminars and a workshop on the strategies of education quality improvement by means of the ICT integration into secondary education. The session will be held by a group of well-known experts and moderators from Denmark, Finland, France, Germany, Netherlands, Russian Federation, Switzerland and United Kingdom. It is based on the latest IITE methodological and training materials - *IITE Medium-Term Strategy 2004-2007* and *Information and Communication in Secondary Education* (IITE Position Paper) and others. All the participants who will successfully complete the programme of the seminar will receive the IITE graduation certificate.

Training Seminar

Retraining of School Educators on ICT Application in Secondary Education

The seminar is aimed at the development of the possible ways of ICT application for the needs of SEE educational systems; preparation of the supporting materials; collection of information on the best existing experience in the field of education development by ICT means. It will also help to develop the sets of the instruction and training materials aimed at reinforcement of national education capacities.

Workshop

Indicators of ICT Application in Education

National experts from the SEE region will get together to discuss the structure of the system of indicators and data collection procedures. As a practical result of this workshop the structure of the statistical survey *Indicators of ICT Use in Education of SEE Countries* will be developed and the groundwork for its further development will be laid.

High Level Seminar

Towards Policies for Integrating Information and Communication Technologies into Education

The seminar is devoted to the analysis of the current situation with ICT usage in education and future prospects of education capacity building in the SEE countries. During the seminar the following issues will be discussed: *Educational Philosophy: Main Trends in Education in the Era of Globalization and Construction of the Knowledge Society; Technological Trends (Megatrends and Responses); ICTs as the Basis of Modernization of Countries' Education Systems: National Strategies, Programmes and Action Plans; New Pedagogy for New Education: Pedagogical Issues; Teachers, the Teaching Profession, Teacher Training and Education; ICTs for Teaching and Learning*, etc. The results of the seminar will promote the development of national strategies and action plans of ICT integration in education.

Session 5 New Pedagogy for New Education :Pedagogical issues

(New paradigms of knowledge and knowledge building, new teaching, new learning, lifelong learning, etc)

Main Presenters: Katja van den Brink and Raymond Morel

Chair: Matti Sinko

Reactors

Background

According to the objectives (cf. below) of this session, it is very important to open some ways to prepare the participants to react, reflect and adapt their own context.

<i>Objectives</i>	<ul style="list-style-type: none">• To illuminate the prevailing pedagogical conditions to be taken into account in design of a policy frame for integrating ICTs into education• To help in drawing guidelines for ensuring the judicious use of ICTs while keeping in view the gender, medium, and curricular considerations• To outline approaches to resolving the dilemmas emanating from the diversities of roles of learners, teachers, assessors, and community• To outline main features of new pedagogy for different types of education, e.g. distance education and Net-education
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Deep Self-regulated Learning with ICT: Prerequisites for its Implementation in Education

The new paradigm of constructivism in the field of teaching and learning offers many new teaching and learning perspectives. Two of them should be presented here in more detail. The first concept, self-regulated learning is mainly based on empirical research in the field of educational psychology. When self-regulated learning with ICT, the learner is able to

determine his/her learning needs & goals

identify resources (books, people, ICT etc.)

choose & use adequate learning strategies according to the aims and resources

monitor the learning process

evaluate the learning state/results

start again the self-regulated learning process if the evaluation demands the improving of the learning results.

The second concept, approaches to learning, derives from qualitative research on the way, learners approach their learning dependently of their learning motivation, their learning aims as well as learning evaluation. When deep learning with ICT, the learner

is intrinsically motivated: he or she enjoys & continues learning, is curious & is interested in the content of the learning task

is independent of external rewards

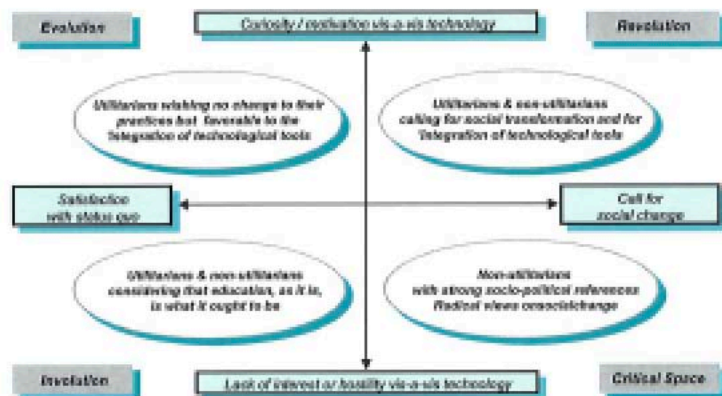
has a personal commitment to the ongoing learning process

After a brief reminder of the 6 OECD scenarii for the school of the future, it was pointed the way to enroled some powershifts into the reflexion through a methodology called OPA (Organiser Per Anticipation).

As illustrations, we can put in action among a set of considerations :

“Teaching vs Learning” against “ICT user vs ICT reluctant”

How to position oneself?



Many teachers set themselves up educationally within a perspective which can be described as ideologically Non-Utilitarian or Non-Instrumental. Their first concerns are for the socialisation and blooming of the pupils entrusted to them. They are also very much concerned with initiative, creativity, individual responsibility, democracy, etc. Three position are available to them:

- They are actively looking for change but they are not interested in technology use (whether they are just passive or hostile). They tend to consider the problem of education as social and political problems. For them the solution

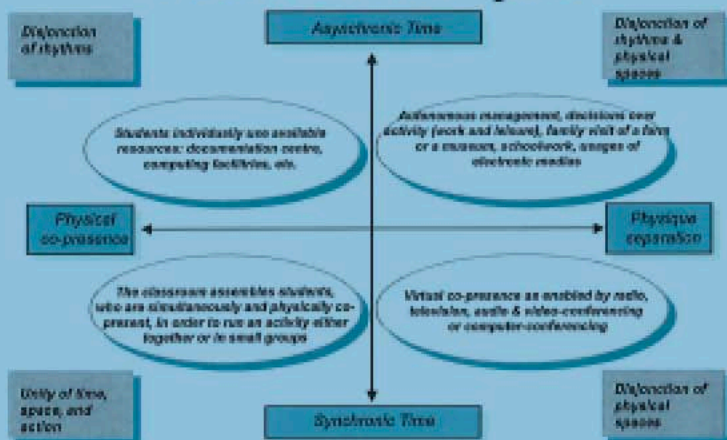
already do but faster or better.

- They are actively looking for change and for the development of technology. They tend to consider technology as a first order opportunity to rich the objective of education, to renew its organisation and thus to contribute to social change.

- They are both passive for change and technology. They tend to consider that school is what it ought to be and is in no way concerned with the development of technology.

“Synchronous vs Asynchronous” against “Same location vs At distance”

Reconsidering the topography of the educational space



The literature on the practice of "flexible", "distant" or "open" learning bears mainly on the very distance itself, the relations between that distance and the modes of communication involved, and what is put at a distance. Distances between formation resources, teachers and students are always mentioned. But the distances between students are rarely considered. Through the analysis of the distances between students, however, one can elaborate clear analytical

Session 7

**NEW PEDAGOGY FOR NEW EDUCATION:
OPERATIONAL ISSUES**

Session 7 New Pedagogy for New Education : Operational Process issues
(tools for pedagogy and for analyzing and evaluating pedagogy)

Main Presenters: Peter Bollerslev and Raymond Morel

Chair: Katja van den Brink

Reactor : Bernard Cornu

Background

According to the objectives of this session (cf. below), it is very important to take in account the real situation of all participants as an heterogenous set of characteristics.

<i>Objectives</i>	<ul style="list-style-type: none">• To come to understanding of the forces favouring the introduction of ICTs in education.• To outline the subtle implications of the profiles of policy-drafters and their possible emphasis upon particular types of guiding principles, assigned priorities and styles of programming.• To give the participants an opportunity to think over guidelines for developing, policy framework, and program formulations.
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The pedagogical ICT License

The pedagogical ICT License, developed by the national Danish support organization UNI-C, was presented and described in this session. It concerns pedagogical ICT professional development of teachers, carried out in blended learning including E-learning. The ICT License ensures adequate ICT-integration at all levels across all subjects, it is economically feasible, a sustainable model and has an even and high quality. It is distributed across the country via distributed course organisation. 55000 teachers have in four years been educated which in Denmark is more than 50%. It is a robust concept which is now localized into 9 school types nationally. The ICT License has an international potential, states in Europe, Africa, and Australia. have adopted the model.

The key philosophy behind the ICT License is that no ICT should be integrated into education without a pedagogical rationale. ICT and the Internet should be seen as means, method and topic. The ICT License is school based, it builds on local collaboration between teachers working in teams (peer learning). The blended approach to learning consists of an introductory day + e-learning via the Internet. Everything happens close to daily practice and parallel to daily practice.

The course has had a drop-out rate less than 15% and it has had a documented impact.

Change of paradigm: From teaching to learning

During the last decade, changes to the role of the teacher have been widely and frequently discussed. Some particularly instructive international studies have included the CERI-OECD study (2001) suggesting six scenarios for the school of

Session 7

New Pedagogy for New Education :

Operationnal Proëess issues

(tools for pedagogy and for analyzing and evaluating pedagogy)

Time	45 minutes (Wednesday 18 February, 14:00-14:45)
Objectives	<ul style="list-style-type: none"> To come to understanding of the forces favouring the introduction of ICTs in education. To outline the subtle implications of the profiles of policy-drafters and their possible emphasis upon particular types of guiding principles, assigned priorities and styles of programming. To give the participants an opportunity to think over guidelines for developing, policy framework, and program formulations.
Content	<p>Technology alone is not enough for delivering the desired services in a complex system. Knowledge about 'Uses-of-Technology' and Knowledge of 'Using-Technology' are complementary. The process issues do deal with the later. Each of the participants may like to understand the situational position of the respective country and deal with these issues in that context.</p> <ul style="list-style-type: none"> Process issues to be observed: <ul style="list-style-type: none"> Drafter of policy Who is driving force? Program formulation Time frames Resources - finance Models of dissemination Sharing information and experience in the field
Working methods	<p>Plenary session: Presentations (30 min. = $\frac{2}{3} \times 15$ min) Reaction (5 min.) Discussion (10 min.) Prioritizing the key issues</p> <p style="text-align: right;">Red ECDL 10 Constatien vs. F3</p>
Moderators	<p>Chair: X <i>Katja</i></p> <p>Main Presenters: : Peter Bollerslev, Raymond Morel and <i>Katja van den Brink</i></p> <p>Reactor: <i>Y Bernard</i></p>
Expected outcomes	<p>Participants will:</p> <ul style="list-style-type: none"> Consider the nature of policy-drafters Outline the suitable models of dissemination of policy decisions Have possibility to suggest process guidelines for ICT policy formulations for the respective countries/regions Correlate the financial resources and time frames with the assigned priority to ICTs and level of economic development of the respective country

Towards the elaboration of a piloting tool

1. Overall parameters and foci

Overall parameters and foci			
Vision and Mission Statement			
Aims and Objectives			
Methods of implementation			
Funding plan secured			
Focus on primary phase			
Focus on secondary phase			
Focus on ICT in vocational education			
Focus on tertiary phase			
Focus on non-formal education			
Focus on gender			
Special Educational Needs (SEN)			

2. Curriculum & pedagogical development

Curriculum & pedagogical development			
ICT as a subject (computer studies and/or skills)			
ICT across the curriculum (in subject teaching)			
Vocational ICT training			

3. Software

Software
Generic software tools
Subject specific software and digital materials
Localising, versioning, licensing
Production, updating and delivery

4. ICT capacity building

ICT capacity building			
- Pre-service teacher education			
- In-service professional / staff development			

