



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Institute
for Information Technologies
in Education

MEDIUM-TERM STRATEGY 2008–2013

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Preface

Established at the 29th session of the General Conference of UNESCO in 1997, the Institute for Information Technologies in Education (IITE) has been called upon to contribute to the design and implementation of the Organization's programmes in regard to the application of information and communication technologies (ICTs) in education.

IITE's Medium-Term Strategy for 2008–2013 comprises of general information about IITE and establishes the six-year guidelines to enable IITE to fulfil its mission and functions. The main domains and directions of IITE's programme of activities and the geographical scope of its implementation are in harmony with UNESCO priorities and strategic programme objectives for 2008–2013, identified in its Medium-Term Strategy (34 C/4).

In line with the role of all UNESCO's institutes and centres, identified at UNESCO General Conference¹, IITE will pursue through its application of information and communication technologies in education the following aims:

- to provide deeper and concentrated resource support and services, especially through policy advice, capacity building, training at regional and sub-regional levels with the professional communities and partners in Member States;
- to serve as a laboratory of ideas, as a centre of excellence as well as a standard-setter (e.g. in the areas of classification and accreditation as well as with respect to methodologies), both globally and regionally;
- to function as a clearing house and reference centre, to advance, deepen and impart knowledge;
- to enhance UNESCO's overall visibility, outreach and impact, as well as its public perception.

Considering the United Nations global reform process embarked since the 2005 World Summit, IITE will focus on strategic priorities to assist UNESCO in improving quality, increasing accessibility, and opening-up of education systems vis-à-vis the world with special emphasis on "results orientation, impact and capacity to deliver" (UNESCO Medium-Term Strategy for 2008–2013 (34 C/4), para 17). In the spirit of the reform trend, this IITE's Medium-Term Strategy for 2008–2013 also indicates the operational and administrative mechanisms for executing the mission of the Organization in the most efficient way.

¹ Principles and guidelines for the establishment and functioning of UNESCO institutes and centres (category 1) and institutes and centres under the auspices of UNESCO (category 2). General Conference, 2005, Ref. 33 C/19, Annex, p.5.

Introduction

Educational change

The modern stage in civilization development is characterized by the increased importance of information and knowledge systems raising the role of ICTs in gross domestic product and contributing to the building of the global information space. 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 scope and prospects of its economic and political integration with the rest of the world.

Adequate response to the challenges of the 21st century assumes providing all society members with equal access to education and preparing competent and knowledgeable citizens. Educational opportunities depend on *literacy* which is a human right, a tool of personal empowerment and a means for social and human development. A good quality basic education equips pupils with literacy skills for life and further learning.

Technologies brought along the demand for special competences related to education and learning. Vast amounts of data are accessible; new technologies make learning possible wherever people are and whenever they need it. With these changes, the concept of literacy is expanding towards what is currently known as media literacy. Media literacy assumes acquisition of competences that are closely linked with a person's ability to access the media and create communications in a variety of contexts. This implies skills to search, collect and process information and use it in a critical and systematic way, assessing relevance and distinguishing the real from the virtual while recognizing the links. Individuals should have skills to use tools to produce, present and understand complex information.

As the international community pursues progress towards achievement of the Education for All (EFA) goals, UNESCO believes the time has come to be more forceful in use of technologies for these ends. Traditional reforms cannot deliver the goals. Increasing the number of school places using the traditional delivery model will not work in time, nor will using classic teacher training systems and existing curriculum to try to meet the goals for quality and inclusion. It is only with innovation in both delivery and methods that there is a hope of meeting the EFA goals.

ICTs can expand access and enhance the quality of education. However, judicious choices are essential for avoiding expensive errors that can have the opposite effect to the one intended. Monitoring progress, understanding results, but also learning by doing, are all essential to advancement.

Information technologies

Being an important element of everyday life, new technologies radically transform the ways of studying, the acquisition of knowledge and skills, and the interaction between people. The broad application of new digital technologies has a great potential to modify the educational system and initiates new pedagogical approaches, appropriate for raising demands of the modern society. In the new millennium, delivery methods of education based on the application of ICTs have become the most prevalent way of providing the up-to-date information to students in the quickest and most flexible ways possible.

Advances in technology continuously arouse enthusiasm about the potential of new devices and connectivity for learning situations. The current time is no exception: wireless networking, low-cost computers, the increasing capacity and flexibility of mobile, hand-held devices, for example, all raise hopes for reaching learners at low cost and with high-quality opportunities. The most rapidly-spreading ICTs are mobile telephony, and education has yet to tap into the potential offered by its reach and flexibility. The bottlenecks of access to technology still exist, but the promise has never been higher. Identifying the technologies that have the highest potential to deliver quality learning requires examination of the teaching and learning environments, as much as that of the emerging tools. As connectivity depends less and less on landlines, expanding the reach of ICTs can become easier.

There is no question that communication technologies are becoming the information source of choice, even in the most remote places. Teachers and often learners in rich countries have access to an impressive range of media to enhance their learning opportunities. Learners in poor countries on the other hand may be lucky to share textbooks, but radio and television reaches them in a variety of ways outside the school environment. Moreover, women and girls do not always have the same access to those media as men and boys. Tools for enquiry, further learning and experimentation are rudimentary or absent. Will we finally see technology providing the way to bypass the difficulties of making print, paper and libraries available to all? Which among the many technologies will have the reach, capacity, adoption and learning tools to make the difference and under what conditions? Capturing what is possible, feasible, and likely to be adopted is a challenge and a task for IITE.

New approaches to teaching and learning are called for with a corresponding change in the roles of all parties to the educational process. Easier access to global communication, including the Internet, the World Wide Web, and the widespread use of computers and interactive multimedia, means that:

- teaching and learning are less dependent on specific physical locations;
- the number of resources available to students outside the classroom is increasing dramatically; and
- the locus of control to initiate educational encounters has now passed to the learner on an 'any time – any place' basis.

The new vision of education highlights the need of effective learning and has shifted the emphasis of various elements involved in the education process. ICTs are not only an important addition to the curriculum content, but they have also added to the educational system a valuable set of new resources and didactical tools suitable to support the learning process.

Within a broad movement working to encourage creators of knowledge and information (including software), UNESCO has been the leader in promoting Open Educational Resources. Open Educational Resources are teaching, learning and research materials that are in the public domain or that can be used under an intellectual property licence that allows re-use or adaptation. The potential of opening up educational resources for use and adaptation by everyone, including and especially in resource-poor environments, is one of the great opportunities in the coming years if we are to achieve quality education for all. This includes developing and sharing materials in multiple languages, ensuring that resources are relevant to the environment, and facilitating participation by educators where access to computers and the Internet is difficult and expensive. While, up to now, open access has been mainly about provision, it must now become an issue of support for ensuring equality.

Given the significant change this implies in the role and skills of the teacher, it is imperative that we address not just new kinds of support for the learner, but also for the teacher. Teachers and leaders in education have been assailed by a succession of technologies with the potential to assist and enhance education, none of which have been developed with education in mind. The task of adopting, trialing, and then adapting these new tools to the requirements of education is complex and difficult to manage. There is the additional problem that education is not typically funded to reinvent itself. Part of the strategic effort in the future development of technology for learning, therefore, must be the development of support tools, guidance and strategic planning for teachers, institutions and national education systems to invest in and plan the transition to blended learning, and uses of ICTs that truly exploit its potential to enhance learning.

Equal opportunities

It is generally recognized that ICTs have great potential to improve the quality of life, and provide new employment opportunities. However, while information technology reached mass diffusion, the problem of particular parts of population not having access to multimedia computers and the Internet, was acknowledged worldwide. It is important to understand that the digital divide is mostly concerned not with technical issues, but with existing social problems, including problems of social inequality, democracy, freedom, social relations and community building.

Whilst ICTs can be very empowering, providing new and previously unobtainable opportunities in society, they can also create new threatening barriers, which prevent social inclusion of some groups of citizens. This applies in particular to the traditionally under-served groups such as people with disabilities, ethnic and faith minority groups, girls and women in some countries, people in disadvantaged or remote areas, etc. Vulnerable and marginalized groups must frequently overcome additional obstacles before they can enjoy the full range of information, services, entertainment and social interaction offered by ICTs. Such digital divide can in its turn, further intensify social exclusion.

ICTs are not available on an equal basis to men and women in developing countries. Domestic responsibilities, cultural restrictions on mobility, lesser opportunities for education and training in computer skills, further marginalize them from the full participation in the society. At the same time, being a tool that can increase individual's access to lifelong learning, new job and business opportunities, inclusion in political, economic, scientific and cultural activities of the society, ICTs are seen as an appropriate mean to resolve unequal social relationships and gender inequality.

There is a growing awareness that persons with special needs have the right to expect the same standard of services and access as every other member of the society. The common principles of this approach were stated in the Geneva Declaration of Principles and Plan of Action at the World Summit on the Information Society by the intention "to build a people-centred, inclusive and development-oriented Information Society. The idea is that everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life. This is premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights"²

Facilitating greater inclusion of such groups into existing educational practices and environments, supporting EFA goals and promoting new opportunities for participation in the knowledge societies have become prime strategic challenges throughout UNESCO's activities. New way of thinking assumes that people will acquire a combination of knowledge, practical and social skills and positive attitudes relevant to the demands of today's societies. In other words, initiatives should be oriented to the new lifestyle concept and corresponding skills-development alongside technological innovations. This entails activities to strengthen national capacities and the professional skills of individuals, to create new content for education. This in turn increases access to information and fosters scientific research which needs to be shared through networking via communication media and information systems. ICT applications in education should help meet the challenges of knowledge societies, contribute to the reduction of the digital divide, including disparities in access to knowledge, and provide opportunities for attaining quality education and lifelong learning for all.

Teachers

No education can take place without competent, committed and motivated teachers, as they are the key players in the learning process. ICTs offer an encouraging environment to mobilize teachers' creativeness and make their didactic practice more flexible and ingenious. The dominant paradigm so far is that teachers need to be taught in the same way as they are expected to teach their pupils. The dilemma of bringing teachers and would-be teachers to a new didactic method, like the integration of ICTs, comes from the fact that teachers themselves have been taught in traditional ways and they do not have first-hand experience of such learning methods.

Alongside the role of ICTs as a learning tool is the potential role of ICTs in the teaching process. It is interesting that the ICT support for teachers has not been focused on the integration of cognitive learning tools; more attention has been paid to WWW-based learning where the main asset is ability to deliver the "just-for-you" content "just-in-time", and to enable and promote correspondence between the learners.

² World Summit on the Information Society. Geneva 2003 – Tunis 2005. The Geneva Declaration of Principles and Plan of Action. Available online: http://www.itu.int/wsis/documents/listing-all.asp?lang=en&c_event=s1&c_type=all

In accordance with UNESCO's intention to improve teachers' practices and to contribute to the professional development of teachers in regard to ICTs, the actions are implemented by its Division of Higher Education (ED/HED/TED), Teacher Training Initiative for Sub-Saharan Africa (TTISSA), International Institute for Capacity Building in Africa (IICBA) and several field offices. IITE also has developed a specialized teacher training programme using ICTs, which consists of eleven courses offered by in-class and online modes.



Major international policy frameworks

The UN Millennium Development Goals (2000)

Goal 2: Achieve universal primary education.

Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Goal 3: Promote gender equality and empower women.

Target 3.A: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.

Goal 8: Develop a global partnership for development.

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communication.

The Education for All Goals (2000)

Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Goal 2: 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.

Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.

Goal 4: Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Goal 5: Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Goal 6: Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

The World Summit on Information Society (Geneva, 2003 – Tunis, 2005)

The Plan of Action of the first phase of The World Summit on Information Society (WSIS, Geneva, 2003) contains five targets that are of particular relevance for achieving EFA goals and fall within UNESCO's areas of competence:

- to connect universities, colleges, secondary schools and primary schools with ICTs;
- to connect scientific and research centres with ICTs;
- to connect public libraries, cultural centres, museums, post offices and archives with ICTs;
- to adapt all primary and secondary schools curricula to meet the challenges of the Information Society, taking into account national circumstances;
- to encourage the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet.

The WSIS Geneva 2003 Declaration of Principles "Our Common Vision of the Information Society"

"Our challenge is to harness the potential of information and communication technology to promote the development goals of the Millennium Declaration, namely the eradication of extreme poverty and hunger; achievement of universal primary education; ..."

The WSIS Geneva 2003 Plan of Action "Capacity building"

"C4. 11 Everyone should have the necessary skills to benefit fully from the Information Society. Therefore, capacity building and ICT literacy are essential. 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 WSIS Tunis Commitment 2005

"... ICTs are making it possible for a vastly larger population than at any time in the past to join in sharing and expanding the base of human knowledge, and contributing to its further growth in all spheres of human endeavour as well as its application to education, health and science. ICTs have enormous potential to expand access to quality education, to boost literacy and universal primary education, and to facilitate the learning process itself, thus laying the groundwork for the establishment of a fully inclusive and development-oriented Information Society and knowledge economy which respect cultural and linguistic diversity."

The 48th session of the International Conference on Education (Geneva, 2008)

"...we call upon Member States to adopt an inclusive education approach in the design, implementation, monitoring and assessment of educational policies as a way to further accelerate the attainment of Education for All (EFA) goals as well as to contribute to building more inclusive societies. To this end, a broadened concept of inclusive education can be viewed as a general guiding principle to strengthen education for sustainable development, lifelong learning for all and equal access of all levels of society to learning opportunities so as to implement the principles of inclusive education.

Therefore, we recommend to Member States to (...) strengthen the use of ICTs in order to ensure greater access to learning opportunities, in particular in rural, remote and disadvantaged areas."

The UNESCO World Conference on Education for Sustainable Development (ESD) – Moving into the Second Half of the UN Decade (Bonn, 2009)

The following statement and call for action are contained in the Bonn Declaration:

In the coming years, there is a clear need for both developed and developing countries, civil society and international organizations to make significant efforts to:

At policy level

- i. Promote ESD's contribution to all of education and to achieving quality education, with particular regard to fostering the linkages between ESD and EFA within a coherent and systemic approach. Foster the goals of the ESD agenda in international fora and at the national level;

At practice level

- ii. Support the incorporation of sustainable development issues using an integrated and systemic approach in formal education as well as in non-formal and informal education at all levels, in particular through the development of effective pedagogical approaches, teacher education, teaching practice, curricula, learning materials, and education leadership development (...);
- iii. Reorient curriculum and teacher education programmes to integrate ESD into both pre-service and in-service programmes. Support teacher education institutions, teachers and professors to network, develop, and research sound pedagogical practice (...);

The UNESCO World Conference on Higher Education (Paris, 2009)

The UNESCO World Conference on Higher Education closed with "a call to governments to increase investment in higher education, encourage diversity and strengthen regional cooperation to serve societal needs:

- Our ability to realize the goals of EFA is dependent upon our ability to address the worldwide shortage of teachers. Higher education must scale up teacher education, both pre-service and in-service, with curricula that equip teachers to provide individuals with the knowledge and skills they need in the twenty-first century. This will require new approaches, including open and distance learning (ODL) and information and communication technologies (ICTs).
- ODL approaches and ICTs present opportunities to widen access to quality education, particularly when Open Educational Resources are readily shared by many countries and higher education institutions.
- The application of ICTs to teaching and learning has great potential to increase access, quality and success. In order to ensure that the introduction of ICTs adds value, institutions and governments should work together to pool experience, develop policies and strengthen infrastructure, especially bandwidth."

UNESCO's role

The United Nations global policy in the long-term perspective is aimed at sustainability based on new modes of interaction between the systems created by people and by nature, overcoming socio-economic inequities and promoting harmonious development of mankind.

In line with UN policy UNESCO promotes the concept of knowledge societies that are inclusive, pluralistic, equitable and open. Information and communication technologies and the information society are both concerned with the creation, acquisition, sharing, dissemination, delivering, support and recognition of knowledge. ICTs are the means for providing access and achieving continuous learning necessary for successful participation of all social groups of population in the information society. Understanding emerging society-needs assumes providing all society members with equal access to education in order to guarantee adequate response to the challenges of the 21st century.

The increasing speed of changes in our world also requires every individual citizen to take part in continuous further development and training as well as in the process of lifelong learning. Adaptation and modernization of education systems are possible only when provided in accordance with technological development.

UNESCO has become one of the most active international organizations in supporting educational system modernization. Following the intention to assist the Organization, IITE, within its status and functions, will support bridging the digital divide in education and building inclusive knowledge societies. This will involve reinforcement of national capacities in promoting e-environments for increasing access to education and lifelong learning, facilitating policy dialogue and initiating development of national strategies on the application of ICTs in education.

UNESCO has a threefold role:

- (1) first, to ensure that decisions about technologies conform to the basic principles of the right to education, of equity and equality, and of democracy;
- (2) second, to help governments and others responsible make informed decisions about selecting and implementing ICT support for education; and
- (3) third, to broker and monitor new partnerships to make this happen.

Highlights of UNESCO's Medium-Term Strategy for 2008–2013

A single unifying theme — UNESCO's Mission:

"As a specialised agency of the United Nations, UNESCO contributes to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information."

Two priority areas, to underpin UNESCO's commitment and support to:

1. **Africa** with a particular focus on the eradication of poverty, the achievement of the Education for All (EFA) goals, and supporting strategies to strengthen national, subregional and regional capacities and develop human resources.
2. **Gender equality** through action in all of UNESCO's fields of competence supported by a two-pronged approach pursuing both women's empowerment and gender mainstreaming.

Following the intention to provide maximum assistance to UNESCO in implementing its mission, IITE will mobilize Institute's potential for realization of its Medium-Term Strategy for 2008–2013.

UNESCO's MISSION				
As a specialized agency of the United Nations, UNESCO contributes to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information				
Overarching objectives				
(1)	(2)	(3)	(4)	(5)
Attaining quality education for all and lifelong learning	Mobilizing science knowledge and policy for sustainable development	Addressing emerging social and ethical challenges	Fostering cultural diversity, intercultural dialogue and culture of peace	Building inclusive societies through information and communication

ICTs in Education at UNESCO

Given that the use of ICTs in and for education is now seen worldwide as both a necessity and an opportunity, this policy issue has been characterised as a high priority area for UNESCO as a whole.

The UNESCO intervention approach for ICTs in Education is devised in the biennial programme and budget documents through sectoral strategies, especially under Major programme I and an intersectoral thematic platform "UNESCO Intersectoral Platform: Fostering ICT-enhanced learning", including inputs from three major programmes — Education, Natural Sciences, and Communication and Information. The Platform will work towards the inclusion of all learners through ICTs, the reinforcement of quality education and training for all, and lifelong learning through the innovative integration of locally relevant ICTs into teaching and learning processes.

ICTs as a vehicle to enhance learning are the vast domain and the Platform group chose the following areas to focus on:

- resources for teachers to use in face-to-face and distance education;
- training of various kinds, including teacher professional development;
- access to scientific and technical information;
- raising awareness and fostering learning on critical issues such as the environment and health.

The first strategy for developing these priority areas, through an interdisciplinary approach, is to create a consolidated web site that makes it easy for users to find UNESCO resources on ICTs and learning, without having to know anything about UNESCO or how it is organised. This priority action and the expected results listed below were decided at a face-to-face intersectoral meeting in July 2008.

Expected results at the end of the biennium:

- Capacity of ministries and quality of teacher training institutions strengthened to offer ICT-enhanced teacher education, through the introduction of ICT competency standards;
- Access to education and learning in Member States expanded through ICT tools;
- Information literacy, teacher training and lifelong learning opportunities expanded through multipurpose community-based centres;
- Education/training “communities of practice” formed to build knowledge and access to open and diverse educational resources at all levels;
- Digital libraries of open educational resources (e.g. open courseware and digital learning objects) developed for quality lifelong learning;
- Role of ICTs in support of the six EFA goals reinforced.

UNESCO’s vision and mission for ICT use in education and lifelong learning

This intersectoral mechanism has recently helped to define UNESCO’s vision for ICT use in education and lifelong learning as follow: “A world without boundaries where technologies support education to build inclusive knowledge societies”.

UNESCO’s mission statement for ICT use in education and lifelong learning consists in promotion of the following approaches:

- A permanent global debate on education and learning for all and ICTs;
- ICTs as levers for educational systems change;
- Using ICTs effectively in the learning environment: for learners, for teachers, and for contents.



IITE's mission and strategic objectives

According to its Statutes, *the Institute shall contribute to the design and implementation of the programmes of the Organization in regard to application of information and communication technologies in education*³. Hence, IITE serves a specific purpose within the fields of competence of UNESCO. It is principally programme-driven, responds to both global and country needs, is a part of an operational network of UNESCO structures and supports the achievement of the strategic objectives of the Medium-Term Strategy as well as the programme priorities of UNESCO, as approved by the General Conference.

Following the intention to assist the Organization, IITE, within its status and functions, will support bridging the digital divide in education and building inclusive knowledge societies by reinforcement of national capacities in promoting e-environments for increasing access to education and lifelong learning, facilitating policy dialogue and initiate development of national strategies on application of ICTs in education.

IITE's mission therefore is to serve as a centre of excellence and provider of technical support and expertise in the area of ICT usage in education.

IITE's potential

The Statutes of the UNESCO Institute for Information Technologies in Education have assigned the following functions for the IITE:

- (a) to promote *collection, analysis, dissemination and exchange of information* on the use of information and communication technologies in education;
- (b) to provide at the request of Member States *advisory services* and promote *studies* in Member States on the application of information and communication technologies in education;
- (c) to offer *technical assistance based on research findings in the design of curricula and courses* on the use of information and communication technologies in education;

³ Source: Article II of the Statutes of the UNESCO Institute for Information Technologies in Education adopted by the General Conference at its 29th session (29 C/Res.6).

- (d) to organize *pre- and in-service training*, including open and distance education, for educational personnel on the use of information and communication technologies in education, giving priority to developing countries and countries in transition;
- (e) to foster *the development of UNESCO regional programmes* on the application of information and communication technologies in education in all Member States and, particularly, in the countries of the Commonwealth of Independent States.

IITE's role is therefore twofold, both normative and informative, gathering facts, data, and examples of good practices and disseminating them widely.

Being the only UNESCO Institute whose activities are specifically focused on ICT application in education, IITE has accumulated a huge potential of expertise and competence in this area. IITE will continue to assist the Organization's Member States in meeting the challenges of the information society in providing Member States with support in policy formulation and analysis. It will also disseminate knowledge about modern forms, methods and the role of ICTs in special education, secondary education, technical and vocational education/training and higher education.

Important milestones and principles of activities were set up in IITE's Medium-Term Strategy for 2002–2007. The Institute contributed to Major Programme I through its strategic objective *Reinforcing national potential in ICT application for the development of education*. To achieve this objective, IITE focused its efforts on three related fields: research and project development, training and clearing-house activities.

Accumulated experience allowed IITE to become a unique international expertise and resource centre, offering advice and guidance on reinforcing national potentials in ICT usage in education for all the UNESCO Member States.

IITE's strategic objectives and expected outcomes

Bearing in mind UNESCO global priorities, striving to make its contribution to attaining Overarching Objective 1: *Attaining quality education for all and lifelong learning*, and Overarching Objective 5: *Building inclusive knowledge societies through information and communication*⁴, IITE will focus its activities on the following strategic objectives:

- (1) Capacity enhancement of Member States on ICTs in education through evidence-based policies, teacher professional development and equity access for vulnerable groups.
- (2) Fostering ICT-enhanced learning through knowledge sharing, Open Educational Resources (OER), networking and cooperation.

⁴ UNESCO Medium-Term Strategy for 2008–2013. Ref. 34 C/4.

Strategic objective 1

Capacity enhancement of Member States on ICTs in education through evidence-based policies, teacher professional development and equity access for vulnerable groups.

Expected outcomes	Performance indicators
<p>Expected outcome 1 Member States assisted in developing evidence-based policies on ICTs in education</p>	<ul style="list-style-type: none"> • Number of countries using IITE work to help them in developing national education policies including plans, programmes and normative laws with ICT strategies integrated. • Number of high-level decision-makers, top educational managers and experts trained by IITE. • Number of countries benefiting from targeted assistance in integrating ICT policies and strategies into national education policy.
<p>Expected outcome 2 Member States assisted in teacher training policies development and implementation in the field of ICTs</p>	<ul style="list-style-type: none"> • Number of countries where teacher professional development policies reflect ICT usage. • Number of countries having incorporated ICTs in their teacher training programmes both as a means of teaching and as a curriculum subject. • Number of countries implementing ICT-enhanced approaches to teacher training programmes.
<p>Expected outcome 3 National capacities strengthened to prepare, implement and manage inclusive policies on promoting equitable access to quality education by means of ICTs (with focus on Africa, gender and people with special needs)</p>	<ul style="list-style-type: none"> • Number of countries where educational programmes, plans and policies on ICT usage have been developed according to the principles of equality and accessibility for all. • Number of countries where educational programmes, plans and policies on ICT usage reflect gender-sensitive learning approaches. • Number of educational programmes targeted on promoting ICTs in the Africa region.

Strategic objective 2

Fostering ICT-enhanced learning through knowledge sharing, Open Educational Resources (OER), networking and cooperation.

Expected outcomes	Performance indicators
<p>Expected outcome 1 Member States assisted to build efficient interaction, knowledge sharing and cooperation on ICT usage in education.</p>	<ul style="list-style-type: none"> • Creation of web services for effective communication among Member states. • Number of high qualitative evaluations received. • Number of successful partnerships established. • Number of training, research and information materials developed and disseminated.
<p>Expected outcome 2 Regional and global OER networks established to support Member States in fostering ICT-enhanced learning.</p>	<ul style="list-style-type: none"> • Number of regional OER networks created. • Number of institutions participating in regional networks. • Number of countries/organizations involved in global networking. • Number and quality of information materials on OER that have been developed and disseminated.

IITE's implementation modalities

For successful implementation of the IITE's Medium-Term Strategy, the Institute will act in the framework of five implementation modalities:

- (1) policy and research,
- (2) capacity development,
- (3) teacher education,
- (4) knowledge services and
- (5) global partnership.

Policy and research

In the field of policy and research activities IITE will concentrate on investigation of pedagogical principles, new methods and the didactics of information environments for lifelong learning. IITE will look at the strategies for improving the quality of ICT-enhanced education, which can only be achieved by monitoring and evaluating educational institutions' activities. This involves collecting, analyzing, disseminating and exchanging information on ICT usage in education.

The importance of extending open access to education by new and highly promising ideology and practices of open source models of the development and dissemination of software applications and educational resources will be accentuated by making emphasis on studies in the field. Research on ICT usage for TVET education will be promoted, involving previously gained experience and data. As a new topic for IITE, ICT-related educational gender analysis will be elaborated.

Capacity development

The UN Development Programme has defined "capacity" as "the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner". The terms "capacity building" or "capacity development" describe the task of developing levels of human and institutional capacity. Whatever the terminology, capacity building remains one of the most challenging functions of development.

IITE will concentrate its efforts to contribute to the pursuit of UNESCO's strategic objectives by providing deeper and concentrated resource support and services, especially through policy advice, capacity building, training and outreach at regional and sub-regional levels with professional communities and counterparts in Member States. IITE will work with national governments to identify what capacity exists in terms of skills, knowledge, institutions and relationships in the area of ICT usage in education. Driven by the priorities of the country in question, it needs look at how to retain what there is, what can be improved upon, where the gaps are and how they can be filled, so that the countries' human development strategies could move from aspiration to implementation. Integrating its research, training and technological achievements, IITE will provide advisory and consultancy services for development of national level policies and strategies, especially in CIS and Baltic States and the African region.

The actual methodology will vary from country to country but should include:

- Presentations on ICT usage in education at the highest levels.
- Training for Ministers of Education in order to ensure overarching support within the state/country.
- Workshops/seminars for national teacher trainers.
- Development and implementation of the master programs and advanced courses on ICTs in education in partnership with the leading universities worldwide.
- Policy formulation, including development of policy briefs and recommendations on relevant issues of ICT usage in education.
- Providing advice to the Member States on policy development and programme's implementation.
- Sharing policy, methodological and information materials on ICT usage in education globally through the web portal and at the country level through IITE network and partners.
- Investigating alternative ways of training secondary teachers.

In line with the UNESCO Medium-Term Strategy for 2008–2013 the principles of gender equality will be integrated into planning, management and implementation of IITE activities on ICTs in education. In most cases, IITE activities will include specific gender components.

Teacher education

Teachers are understandably concerned about change (unfortunately there is a history of bad initiatives which have often ended with a return to previous methods) and are reluctant to innovate individually, particularly when they themselves have no experience of learning through ICTs.

In the first instance we need to have IT-literate teachers. The problem then is that teachers are not aware of their own standing in terms of using ICTs in learning and teaching. The fact that they might have Internet access through their interactive whiteboards might lead them to believe they are fully competent in using ICTs. Unfortunately their classrooms may be no different than those of teachers with blackboards and chalk if they are not exploiting the potential of ICTs.

Aiming at enriching capacity potential at national and local levels, IITE will further develop its Training programme, constantly renewing training materials and using different ways of delivering and forms of training (making accent on e-learning). Training materials will be available in print and digital forms and the trainees can select to attend the face-to-face lectures, take the course completely online, or combine both formats. IITE e-learning facilities will be shared with other UNESCO initiatives for human resources development programmes.

Knowledge services

UNESCO is giving a high priority to the application of ICTs for more equitable use in education. Social and cultural barriers and unequal opportunities manifested in access to quality education remain one of the most serious difficulties of national educational policies. Striving to fulfil the function of centre of excellence, to advance, deepen and impart knowledge and capacities and to employ novel methods, IITE will support the educational communities with research findings, training materials and best practices. It will do this through dissemination of IITE publications in paper and electronic forms, involving the readers in discussions and getting feedback. Striving to find out global changes, trends and prospects on different aspects of ICT usage in education, IITE will carry out an annual international survey.

Aimed to mobilize, in an innovative setting, a critical mass of specialized expertise, know-how and skills that cannot be made available within UNESCO's regular Secretariat structure, IITE has a very important mission. It plans to extend a different 'on-request information services' in the field of ICT usage in education for Secretariat units, field offices, institutes, National Commissions and other UN agencies. Activities of information dissemination and advocacy will be made not only for IITE programmes, but for ICTs in education activities in UNESCO as a whole.

In order to enhance UNESCO's overall visibility, outreach and impact, as well as its public image as a highly relevant organization, to establish a strong online community for networking and sharing of knowledge, IITE will use its e-representation activities, using web sites, interactive web tools, e-digest, mailing lists, etc. All units of IITE will make inputs to the development and maintenance of open-access, online reference services in the field, such as multilanguage databases, electronic forums and discussion groups. On the one hand, IITE web portal will serve as a navigator on up-to-date information on local, national and international levels, and, on the other hand, it will contain meta databases on different topics of ICT-enhanced education.

Global partnership

IITE will reinforce its national focal points network as a multi-purpose tool for direct information, expertise and operational interaction with Member States. Extending the self-resourced, authorized training-centre approach to international level will increase the target audience of IITE training services. IITE will establish active cooperation with relevant networks and experts in the field of ICTs in education.

IITE will further develop its partnerships, focused on:

- interaction within the UNESCO system;
- cooperation with other involved thematic UN agencies, such as UNDP, World Bank group, ITU and FAO;

- interaction with Member States, especially through the ministries of education, the academia, and the civil society;
- collaboration with professional organizations in the field: IFIP, IEEE, G3ict;
- liaisons with other intergovernmental organizations, like COL;
- cooperation with private sector technology and software vendors.

Trying to enhance UNESCO's overall visibility, outreach and impact, as well as its public perception, IITE will be concentrated on extending representation of:

- activities on information dissemination and advocacy not only for IITE programmes, but for ICTs in education activities in UNESCO as a whole;
- e-representation of IITE activities, using web sites, www interactive tools, e-digest, mailing lists, etc.;
- organizing with the use of IITE web platform discussions (online discussions) on various 'ICTs in education' issues for different target audiences.

To concentrate its resources, IITE will make efforts aimed at:

- enriching its human and financial resources;
- seeking extra-budgetary resources through implementing strategy and action plan, including targeted Donors' events and negotiating multi-year funding with the corporate sector.

IITE's mission, strategic objectives, expected outcomes and indicators at a glance

IITE's MISSION				
IITE's mission is to serve as a centre of excellence and provider of technical support and expertise in the area of ICT usage in education				
IITE's strategic objectives				
Strategic objective 1. Capacity enhancement of Member States on ICTs in education through evidence-based policies, teacher professional development and equity access for vulnerable groups			Strategic objective 2. Fostering ICT-enhanced learning through knowledge sharing, Open Educational Resources (OER), networking and cooperation	
Expected outcomes				
Expected outcome 1: Member States assisted in developing evidence-based policies on ICTs in education	Expected outcome 2: Member States assisted in teacher training policies development and implementation in the field of ICTs	Expected outcome 3: National capacities strengthened to prepare, implement and manage inclusive policies on promoting equitable access to quality education by means of ICTs (with focus on Africa, gender and people with special needs)	Expected outcome 1: Member States assisted to build efficient interaction, knowledge sharing and cooperation on ICT usage in education	Expected outcome 2: Regional and global OER networks established to support Member States in fostering ICT-enhanced learning
Performance indicators				
<ul style="list-style-type: none"> Number of countries having developed national education policies including plans, programmes and normative laws with ICT strategies integrated Number of high-level decision-makers, top educational managers and experts trained Number of countries benefiting from targeted assistance in integrating ICT policies and strategies into national education policy 	<ul style="list-style-type: none"> Number of countries where teacher professional development policies reflect ICT usage Number of countries having incorporated ICTs in their teacher training programmes both as a means of teaching and as a curriculum subject Number of countries implementing ICT-enhanced approaches to teacher training programmes 	<ul style="list-style-type: none"> Number of countries where educational programmes, plans and policies on ICT usage have been developed according to the principles of equality and accessibility for all Number of countries where educational programmes, plans and policies on ICT usage reflect gender-sensitive learning approaches Number of educational programmes targeted on promoting ICTs in the Africa region 	<ul style="list-style-type: none"> The creation of web services for effective communication among Member States. Number of high qualitative evaluations received Number of partnerships established. Number of training, research and information materials developed and disseminated. 	<ul style="list-style-type: none"> Number of regional OER networks created. Number of institutions participating in regional networks. Number of countries/organizations involved in global networking. Number and quality of information materials on OER that have been developed and disseminated.