Access, Equity and Quality:
Envisioning the Future of Higher Education in a Digital Age

A robust and equitable higher education system that promotes quality teaching, learning and research is central for success in the 21st century. Higher education has been subject to socioeconomic pressures and affected by such drivers of change as globalization, massification, demographic trends, and an increasingly ubiquitous use of information and communication technologies (ICT). In addition, universities face challenges related to growing student numbers, diversification and differentiation of providers and functions, as well as increased market demand, while the resources are declining. ICT can be a tool for solving some of these problems. ICT support practically every aspect of higher education, including teaching, learning, research, administration, finances, security, and sustainability. However, the major mission to be served by ICT in the digital age is to support universities in training citizens for living in the digital society, in nurturing skills that are meaningful and applicable in the digital workplace, in teaching to deal with digital concepts and technologies not only in terms of knowledge, but primarily in terms of competences, skills, ways of working and communicating. A vision of a 'future agenda' for ICT in higher education would help to fully use the potential provided by ICT and the available prerequisites for reshaping the future of education and transforming the paradigm of higher education.

Numerous foresight studies have been undertaken for education but only few of them were focused on ICT in higher education. Foresight in ICT in education is necessary for a number of reasons. The educational system uptakes new ICTs in educational environments and practices quite slowly, which results in a technological gap between formal educational environments and learners' everyday activities. The educational system fails to cater to the needs of modern learners and society, the more so now, when the 'digital natives' or 'new-millennium learners' who were *ad initium* immersed in high-tech environments graduate schools and enroll in universities.

This project has been initiated by the UNESCO Institute for Information Technologies in Education and Higher Education Section at UNESCO Headquarters to bring together internationally recognized experts in education, ICT in education, educational technology, and foresight. The following long-term foresight players and higher education stakeholders have been invited to collaborate on the project: Organization for Economic Cooperation and Development (OECD), EDUCAUSE, International Council for Open and Distance Education (ICDE), Institute for Prospective Technological Studies (IPTS)-EC, New Media Consortium (MNC), Skoltech and representatives of several leading universities. The project also envisages engaging UNESCO Chairs in ICT in Education and Pedagogy in sharing best practices that might lead to a variety of plausible "alternative futures" for ICT in higher education and life-long learning.

> Building on the wealth of data, knowledge, expertise, and analytical capacity located throughout its various sectors, specialized institutes, regional bureaux and international networks of researchers and practitioners, UNESCO has traditionally been called upon to inspire approaches to education and provide guidance for policy development worldwide. Current concerns towards, and beyond, the 2015 international development and education agendas in a changing global context calls for the strengthening of UNESCO's role in research and foresight.
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> *Main Line of Action 3: Advancing Education for All (EFA) and shaping the future international education agenda*

Project objectives

1. Capturing the ongoing trends in the impact of digital technologies on society and on higher education based on the analysis of ICT-related innovations
2. Extrapolation of current/emerging trends/challenges into the future; development of a descriptive vision of the future, identification of the strategies, which might ensure that learning at universities will adequately employ the potential of ICT to widen access to high quality higher education
3. Engaging a broad range of stakeholders in structured evidence-based dialogue about long-term implications of ICT-related innovations in higher education
4. Drawing up recommendations for policy and decisions makers in higher education on innovative ways to leverage cutting-edge technologies in order to stay competitive and prepare students for successful careers throughout life.

Design and methodology

An extensive desk research was completed and a summary of policy briefs commissioned by UNESCO IITE was produced at the preparatory stage of the project.

A kick-off meeting that will take place on March 25-26, 2015 at UNESCO's Headquarters in Paris will address the objectives of the project, a list of common problems and issues to be reviewed, and an agreed set of outputs. One of the main goals of the meeting will be the development of an agreed methodological framework of the project that should be tailored to achieve the main project objective of creating a new shared long-term vision for ICT in higher education. The proposed time horizon for the foresight exercise is 15 years. The project participants may decide on specific approaches to be used in the foresight process:

- Virtual panels of policy/decision makers
- Mapping and assessment of major relevant trends and challenges
- Surveying experts and higher education practitioners
- Analysis/generalization of the results of the panel/survey and feedback from UNESCO Chairs

The bulk of the work will be carried out by the project team and expert panels. The panels will gather and assess relevant futures information to formulate their future images of ICT in higher education. The future images will be cross-validated and cross-checked with respect to the feasibility and desirability of the future statements generated by the expert panels with a wider circle of interested stakeholders. The panels will be also responsible for drawing up detailed and concrete recommendations for next steps after the vision will have been completed.

Expected project outcomes

This study will result in the development of:

- A methodology framework document
- Analytical desk-study report
- A monograph summarizing the results of the project and including a catalog of innovations identified worldwide
- A summary report, including recommendations for the next steps

Promoting research and foresight: UNESCO will mobilize international research networks, monitor the state and status of research in education, analyze emerging development trends and their implications for education and contribute through evidence-based dialogue on various education issues to the global policy agenda. The wealth of expertise and experiences in Member States linked to UNESCO through various professional networks, complemented by UNESCO's category 1 and 2 institutes, will be the major force for such a task.

Main Line of Action 3: Advancing Education for All (EFA) and shaping the future international education agenda