

Kronberg Declaration on the Future of Knowledge Acquisition and Sharing

We, the members of a group of experts who met on 22 and 23 June 2007 in Kronberg, Germany, at the invitation of UNESCO and the German Commission for UNESCO, with the generous sponsorship of BASF, discussed the future of Knowledge Acquisition and Sharing over the next twenty-five years:

Recognizing that:

- Knowledge is the key to social and economic development;
- Creation, acquisition and sharing of knowledge have been going through dramatic changes because of rapidly emerging new information and communication technologies (ICT) and the societal transformations that they generate;
- New approaches are needed to bridge international knowledge gaps while ensuring cultural and linguistic diversity;
- The Internet and new education technologies provide manifold opportunities for all;
- There is a need to continuously harness new technologies and processes to develop knowledge societies that are people-centered, inclusive and development oriented;

Affirming the continued value of many findings included in the Report of the International Commission on Education for the Twenty-first Century, "Learning: The Treasure Within" (1996);

Referring in particular to its observation that "the progress of the new information and communication technologies should give rise to a general deliberation on access to knowledge in the world of tomorrow", which has continued to nourish international debate especially at the World Summit on the Information Society (WSIS);

Having identified the major strategic areas which should be addressed to shape the political and structural changes that are needed to improve knowledge acquisition and sharing, including:

- The impact of technology on the evolution of knowledge societies;
- The concept of universal "knowledge norms"¹;
- The impact of emerging technologies on models of knowledge acquisition;
- The future role of classical knowledge acquisition structures including those of teachers/trainers;
- The role of public-private partnerships in knowledge acquisition and sharing;

¹ The term "knowledge norms" is an abstract notion referring to assessment and certification models for measuring competence in various areas of skills and knowledge.

Anticipating that over the next twenty-five years:

- Knowledge acquisition and sharing will increasingly be technology mediated (e.g. online), and thus traditional educational processes will be revolutionized and new knowledge communities will be formed;
- Leaders in the public and private sectors must embrace change in organizations and people by providing opportunities and incentives to facilitate and motivate, as well as to overcome typical barriers in knowledge acquisition and sharing;
- Knowledge acquisition and sharing institutions will have to focus more closely on the development of social and emotional abilities and skills, and to come to a wider, value-based concept of education;
- The importance of acquiring factual knowledge will decrease, whereas the ability to find one's way in complex systems and to find, judge, organize and creatively use relevant information, as well as the capability to learn, will become crucially important;
- The importance of the role of teachers as instructors will decrease, while their role as facilitators, consultants, guides and coaches for learners, as role models and as validators and interpreters of knowledge sharing, creation and acquisition, will increase;
- Continuous professional development of teachers to assume their emerging new roles will be demanded, including the effective use of new technologies;
- Learners will play an ever more active role in knowledge acquisition and sharing, including in content creation and dissemination;
- A mix of learning and social spaces including (a) traditional schools for providing core values and social competencies and (b) online learning communities, especially communities of practices, will remain important to address more specific challenges;
- Face-to-face knowledge acquisition settings will remain vital as socializing environments especially in early childhood and in primary and secondary education; and ICT enabled learning will become more relevant in post-secondary and higher education settings and in life-long learning;
- The private sector will play an increasingly important role as an accelerator of technology development, usage models and efficiency in the area of knowledge acquisition and sharing and as a contributing partner in standard-setting for content creation, packaging, dissemination and utilization tools;
- Knowledge acquisition and sharing will be increasingly tailor-made, including the liberalization of certification processes, taking both acquired codified and tacit knowledge into consideration;

- Global efforts related to Free and Open Source Software (FOSS) as well as Open Educational Resources (OER) will play a more profound role in knowledge sharing;
- Open access to and free flow of content, as well as participation in the creation of this content, will be of crucial importance for equitable knowledge acquisition and sharing;

Stress the need to:

- a) Develop long-term strategies to efficiently harness the enormous potential of new communication and information processes and technologies for developing new approaches to knowledge acquisition and sharing;
- b) Ensure that these strategies embrace the needs of developing countries, thereby diminishing the growing digital divide;
- c) Integrate these strategies into forward-looking and sustainable policymaking;
- d) Invite all stakeholders, including the private sector, academia and user communities from various age groups and with different cultural backgrounds to participate in the development of these strategies;
- e) Establish efficient multistakeholder partnerships to provide sustained, long-term real solutions for ICT application in knowledge acquisition and sharing;
- f) Provide opportunities for all to participate in networked social learning, which is locally and globally relevant, which values tacit knowledge and enhances informal learning;
- g) Promote user-friendly ICT applications to make knowledge acquisition and sharing available to everybody anywhere and anytime;
- h) Support open access to and free flow of content through the development of open standards, open data structures, and standardized info-structures, as well as other elements of cyber-infrastructure necessary to support individual learners around the globe;
- i) Enable the creation of open content by practitioners in the developing world, and generally ensure the development of culturally sensitive content;
- j) Develop flexible knowledge norms (e.g. dynamic knowledge/skills profile);
- k) Preserve mother-tongue languages while encouraging competencies in one or more global languages;
- l) Develop new and creative business models to support the sustained creation and dissemination of high quality content;
- m) Adapt educational assessment to the requirements of a globalized world, taking into account migration and brain-drain issues;

- n) Redefine the goals and mechanisms of assessment, to embrace the four pillars of learning: “learning to know, learning to do, learning to live together and learning to be“;
- o) Ensure long-term and sustained availability of digital content and interoperability of e-education and e-training systems on the global level as crucial elements of knowledge acquisition and sharing;

Recommend:

- a) Continued reflection at the expert level in an international setting;
- b) Establishment of a multistakeholder Task Force on Harnessing the Potential of ICT for Knowledge Acquisition and Sharing (to be called “Vision 2025”);
- c) Preparation of a report outlining long-term strategies to the Director-General of UNESCO for potential presentation to the 35th session of the General Conference of UNESCO (October 2009);
- d) Presentation of this report for discussion to the multistakeholder community (e.g. through the establishment of online collaboration spaces and the organization of an international expert symposium/conference).
- e) Linkage of further reflection on these issues to the ongoing work regarding the follow-up and implementation of the outcomes of the World Summit on the Information Society.