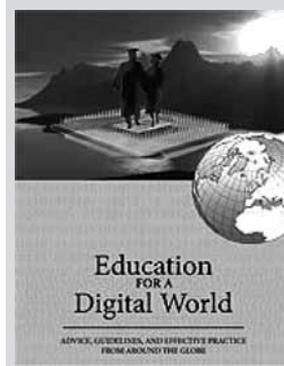# EDUCATIONAL FOR A DIGITAL WORLD
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BCcampus and Commonwealth of Learning, 2008

Educational for a digital world. Advice, Guidelines, and Effective practice from around the Globe builds up, around the educative problems in the digital world, a polyphony of voices coming from different geographical areas, giving an interdisciplinary authoritative vision. The recent on line publication (2008) edited by Commonwealth of Learning (COL) - whose mission is to disseminate and share the acknowledgement of distance education, especially in favour of developing countries - has made available contributions of different researchers showing, in an analytic way, innovative design, implementation and evaluation models for the actual e-learning proposals, finding best practice and case studies.

Home page
http://www.col.org/resources/
crsMaterials/Pages/edDigitalWorld.
aspx

The purpose to clarify and reorganize the knowledge acquired so far shows through the division of the different contributions into five referential macro-areas: *The Impact of Instructional Technologies; Preparing online courses; Implementing Technology; E-Learning in action; Engagement and Communication.* All the macro-areas are based on a wide perspective that consider the possible implications resulting from the adoption of different pedagogical models and learning tools in the digital world.

The Introduction section has been built around the problems related to the technological impact on the educational systems of developing countries. Afterwards the description and evaluation of tools, strategies and common standards for the design of e-learning courses is presented, until reaching the development of the currently more advanced perspectives and communication objectives.

In general, technology is seen on its fundamental aspects: it gives an important support to the cognitive diffusion and literacy, above all in the countries in which access to educational structures, of whichever level, is difficult or nearly impossible. Nevertheless, technological development involves a serious obstacle: the increasing digital divide between the countries strongly digitalized and the extremely illiterate countries from the technological point of view. Whereas one would like to export the occidental countries pedagogical models, it is necessary to consider the need to adapt this models to specific situations and countries in which there are not adequate technical skills and infrastructures. Since the knowledge and the ideas goes around on a one way communication, that is from north to south, a suspicious feeling (against the " cultural imperialism") and a false consideration of one's own doing (often considered as "exportation of the democracy") are generated. But the idea of the knowledge and culture global village, that is still based on the spread of information, experiences and knowledge, orientates the cultural, social, geographical and technological diversity towards common pedagogical principles and innovative design and evaluation systems. This sharing and cooperation can only support a process of peace and a better future for all countries. The project "BCGOCLP - The British Columbia-Ghana Online Collaborative Learning Project", based on the principals of "Classroom without walls" and "Global Village", refers to the above mentioned values: students of Ghana and Canada university together with the teaching staff of both countries, collaborate towards the development of the Sociology of

Global Inequalities, through Web conferences, chat, synchronous and asynchronous lessons.

Practical cases are used, in the central part of the publication, to explain the whole planning, implementation and evaluation process of an e-learning project. The taxonomy of Bloom's educational objectives, dated to 1956, although with some adjustments, is presented as still useful for the planning of e-learning courses, since they are not far away from the traditional educational courses for what concerns the training objectives.

Taxonomy of Bloom
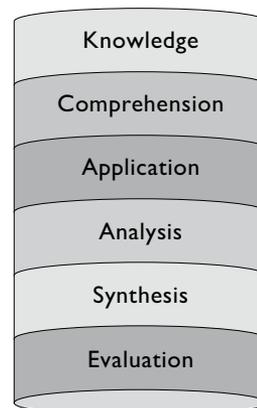
The IT systems, software and different applications, are more specific for the realization of online courses, in accordance with the selected training objectives. Starting from this perspective, in *Part 2: Preparing Online Courses* and *Part 3: Implementing Technology* are illustrated subjects related to open source system, the use of common protocol and standards, the coherence of instructional designers' technological tools, the copyright and the availability of free software. All those matters do not regard the lawfulness of the resources sharing, taken for granted in the knowledge "Global Village", but their compatibility and reusability. In particular the problem is related to the software and the technological tools for which is fundamental to assure the applicability to different IT platforms.

The *Educational for* a *Digital World* insists in particular on these aspects, dedicating a wide section of the manual to the Open Source Initiative OSI (http://www.oss-institute.org), the organization

which takes care of disseminating the open source licensing.

- Free redistribution.
- Readily available and useable source code.
- Permission for modification of the original code and derived works.
- Conditions for maintaining integrity of the author's source code.
- Equality of access regardless of person or group.
- Equality of access regardless of field of endeavour.
- Extension of original free distribution rights for sub-sequent redistributions.
- Independence of, or extractable from, particular packages of software or hardware.
- Licensing restrictions of the open source program do not automatically extend to additional software distributed along with it.
- Non-restriction of the software to any type of technology or user interface so that it may be redistributed via means other than the Internet and may run in environments that do not allow for popup dialogue windows.

In the section *E-learning in Action,* the problem of quality, very important in the e-learning community, is analyzed. Distance education has been often considered as an incomplete form of education derived from the traditional teaching and learning model and linked to sheer practical needs. Actually the on-line course delivery is not based on the simple transposition of a traditional course to the electronic form. On the contrary, if compared with the traditional systems, the e-learning design implies the respect of more strict pedagogical parameters, constantly updated, and of a more dynamic quality evaluation system. Since distance education has to replace face-to- face relationship, the monitoring of the didactic activities and the related feed-back is the better way to control, evaluate and improve the learning objects.

The phases of the instructional
design process

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│ Develop criterion-reference test    │        │   │
│ questions                           │        │   │
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│ Develop and select instructional    │        │   │
│ materials                           │        │   │
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│ Conduct formative evaluations       │        └───┘
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│ Final product                       │
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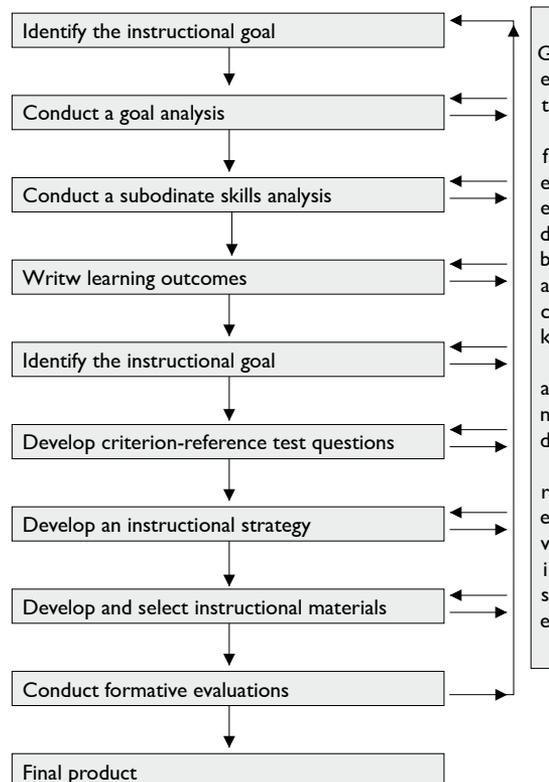
In addition to this, this monitoring activity favours a high testability of innovative or unusual tools born in the digital era and adaptable to the educational context, like blog, chat, animation and games, virtual communities.

The last part of the book is dedicated to the analysis of some typical aspects of the Internet and the computer science world that is difficult to compare with the traditional educational system. It deals with the creation of a big communication and collaboration system among students coming from all parts of the world. As already noticed in the traditional education system, through different students mobility programmes, like Erasmus for the European context, the intercultural exchange favours people's knowledge about different cultures and the students' sense of community.

This purposes are also valid for the e-learning context, since the Internet and the Web have changed the way people and countries

communicate and interact. Different tools, like blogs, wikis and digital storytelling, favours the creation of communities of students, teachers and families aiming at sharing best practices and implementing fruitful cultural exchanges.

A system that improves the possibilities and the training objectives of e-learning courses, in the framework of a combined development of education and technology.