



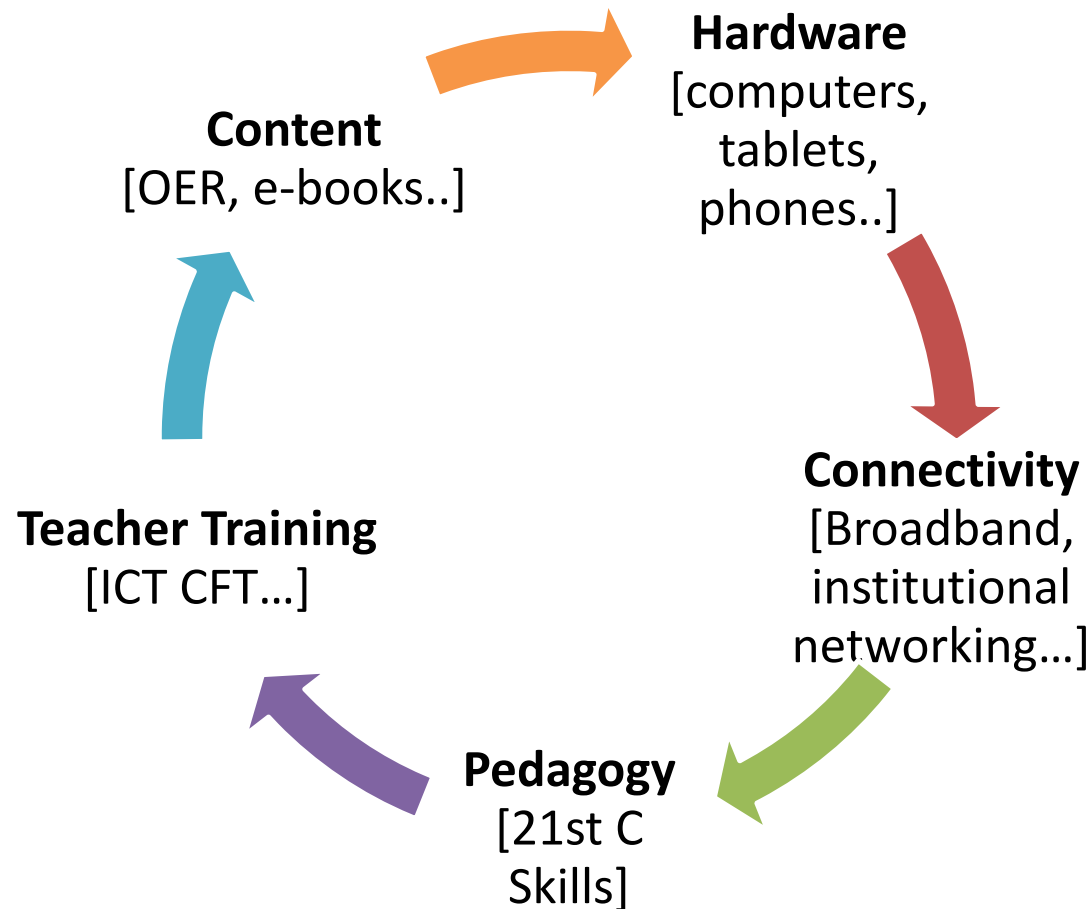
ICT in Education

Communication and Information Sector

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The ICT in Education Ecosystem





Issues

Teaching – Professional Development, competencies

Widening Access

- Open Educational Resources
- Mobile Learning
- MOOCs

Funding Models for Open Content and Dissemination



Knowledge Societies – Knowledge Economies

Traditional Economies

- Output increases with input
- Companies purchase more equipment and employ more workers resulting in capital accumulation
- Demand for manual skills and routine cognitive tasks

Knowledge Economies

- Growth generated through new knowledge, innovation and the development of human capacity
- Less demand for manual skills and routine cognitive tasks
- More demand for problem solving, communication skills and team skills
- ICT substitutes for low- skilled worker and augments high – skilled workers



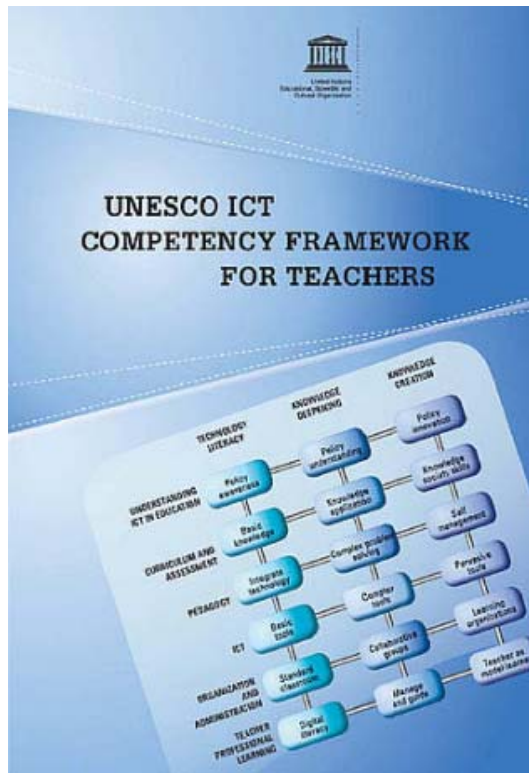
21st Century Skills

| Learning and Innovation "The 4 C's" | Digital Literacy | Career and Life |
|--|----------------------|-------------------------------------|
| Critical thinking & problem solving | Information literacy | Flexibility & adaptability |
| Creativity and innovation | Media Literacy | Initiative & self-direction |
| Communication | ICT Literacy | Social & cross-cultural interaction |
| Collaboration | | Productivity & Accountability |
| | | Leadership & responsibility |

Table 1 - P21 Skills

source : http://en.wikipedia.org/wiki/File:P21_Skills.jpg; image by Charles Fadel

Teacher Training : ICT CFT



The ICT Competency Framework for Teachers

• A set of competencies that teachers need to integrate ICT into their practice and professional development to advance student learning.

- *The ICT CFT V.2 (2011) is an update of the ICT CFT V.1 (2008)*
- *Result of partnership between UNESCO, CISCO, INTEL, ISTE and Microsoft*

What's inside?



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UNESCO ICT Competency Framework for Teachers
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Overview of 3 Modules and underlying principles of the Framework

Appendix I. UNESCO ICT Teacher Competency Framework modules

Appendix 2. Example syllabi and exam specifications for each module

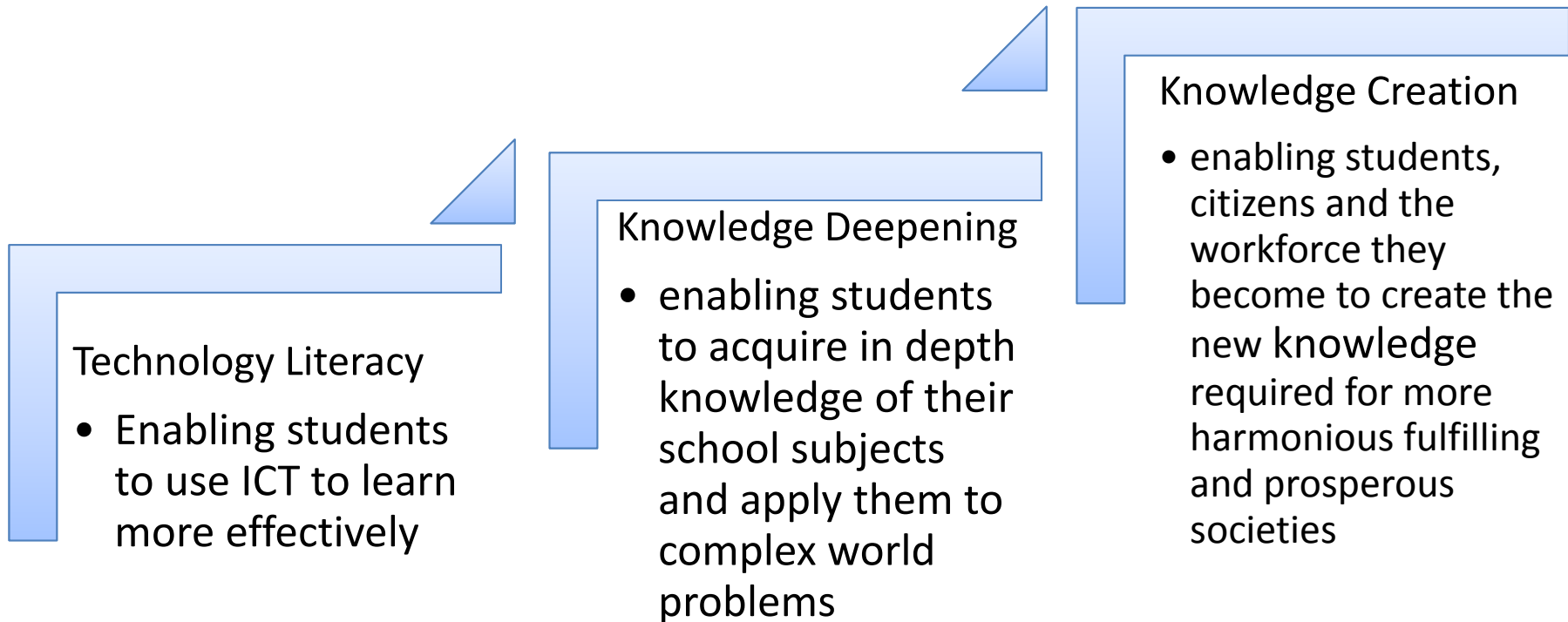
Glossary of key terminology for a common understanding

Open License allowing users to use, re-use and modify.



ICT CFT Knowledge Ladder Framework

Conceptual Framework for Policy Planning





The ICT CFT Main Framework

| <i>Approach :</i> COMPONENT: | <i>Technology Literacy</i> | <i>Knowledge Deepening</i> | <i>Knowledge Creation</i> |
|---|--------------------------------|--------------------------------|-------------------------------|
| UNDERSTANDING ICT IN THE CLASSROOM | Policy awareness | Policy awareness | Policy innovation |
| CURRICULUM AND ASSESSMENT | Basic knowledge | Knowledge application | Knowledge society skills |
| PEDAGOGY | Integrate technology | Complex problem solving | Self management |
| ICT | Basic tools | Complex tools | Pervasive tools |
| ORGANISATION AND ADMINISTRATION | Standard classroom | Collaborative groups | Learning organizations |
| TEACHER PROFESSIONAL DEVELOPMENT | Digital literacy | Manage and guide | Teacher as model learner |



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COMMUNICATION AND INFORMATION

Empowering people through access to information and knowledge



OER is NOT the same as....



Online
Learning



Content: Open Educational Resources (OER)

Any educational resource/materials that may be freely accessed, reused, modified and shared
...openly available for use without paying royalties/licence fees



Image:

http://foothillglobalaccess.pbworks.com/w/page/13095903/Open_Educational_Resources

<http://www.globalkap.com/Industries/Legal>

What is an OER?

- Curriculum frameworks and maps
- Course materials
- Documents
- Books
- Research articles
- Multimedia applications
- Podcasts
- Videos
- Software and programmes.....etc



UNESCO World OER Congress 2012



UNESCO HQs, Paris (20-22 June 2012)

Participants:

- Ministers /senior policy makers
expert practitioners/ researchers and
relevant stakeholders

Aims

- To showcase innovative and promising
practices in OER policies and initiatives
- Debate and adopt the Paris OER
Declaration



Paris OER Declaration 2012

- a) Facilitate awareness and use of OER
- b) Facilitate enabling environments for use of ICT.
- c) Reinforce the development of strategies and policies on OER
- d) Promote the understanding and use of open licensing frameworks
- e) Support capacity building for the sustainable development of quality learning materials
- f) Foster strategic alliances for OER
- g) Encourage the development and adaptation of OER in a variety of languages and cultural contexts
- h) Encourage research on OER
- i) Facilitate finding, retrieving and sharing OER
- j) Encourage the open licensing of educational materials produced with public funds

CREATIVE COMMONS LICENSES

most free



least free





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Creative Commons Licenses



Some OER Funding Issues

- Sharing of the costs of material development
- Ensuring that educational developed using public funding remains public!
-



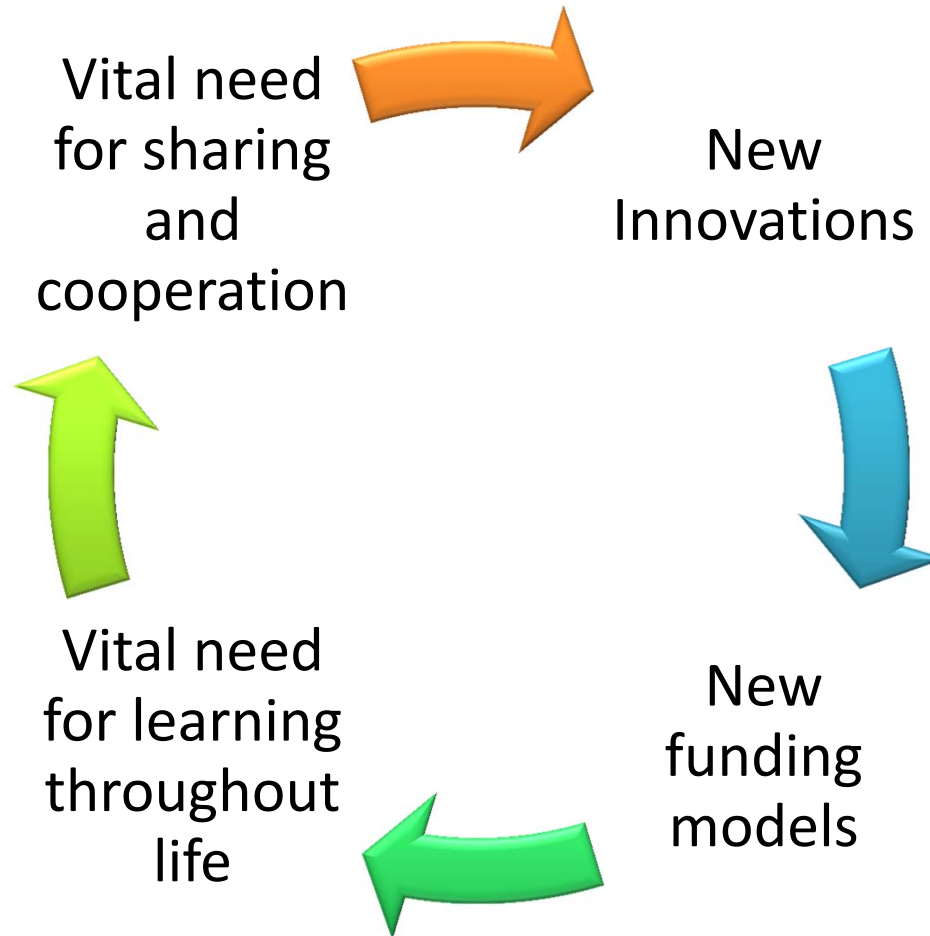
Open Solutions for Open and Distance Learning

Objective: Policy support for Open and Distance Learning using Open Solutions:

- OER;
 - Free and Open Source Software;
 - Open Access to scholarly publications
-
- ❖ Guidelines on the Inclusion of Students with Disabilities in ODL using Open Solutions



Conclusions





Thank you

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