

POLICY ADVOCACY  
AND RESEARCH

TECHNICAL ASSISTANCE

TEACHER  
PROFESSIONAL  
DEVELOPMENT

DIGITAL PEDAGOGY

OPEN EDUCATIONAL  
RESOURCES AND  
LEARNING MATERIALS

NETWORKING AND  
PARTNERSHIP



The informational workshop  
“Digitally Competent Educational Organizations”

Ministry of Education, Culture and Sport of Spain  
Madrid, May 24, 2016

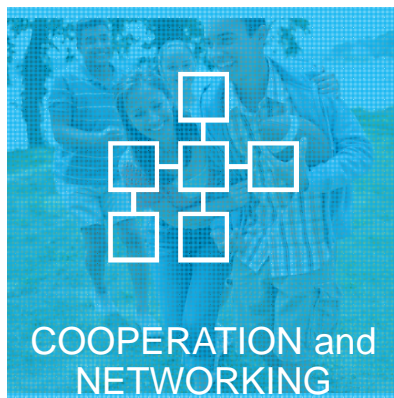
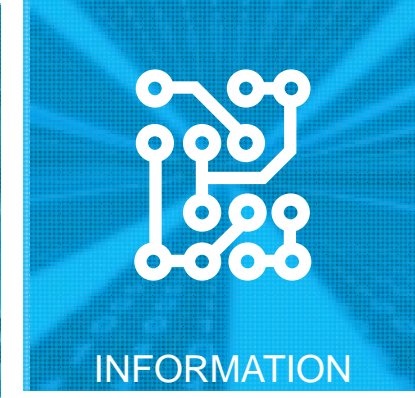
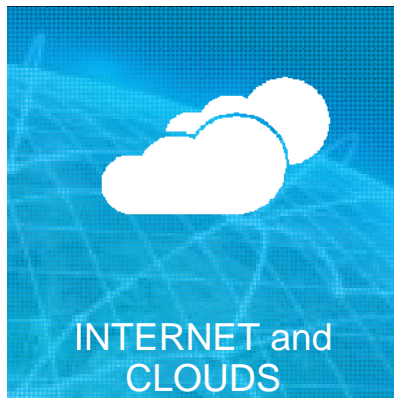
# ***ICT and Digital Competency in Education. Main Challenges, UNESCO Approach and IITE Experience***

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Head a.i. of UNESCO IITE

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## *Main socio-economical factors related with ICT intrusion*



# ICT Impact to Education



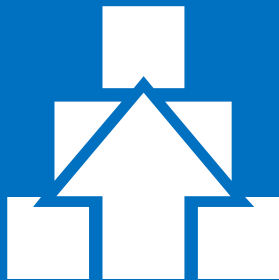
ORIENTATION TO  
INNOVATIVE  
PEDAGOGICAL  
PRACTICES



IMPROVEMENT OF  
LEARNING EFFICIENCY



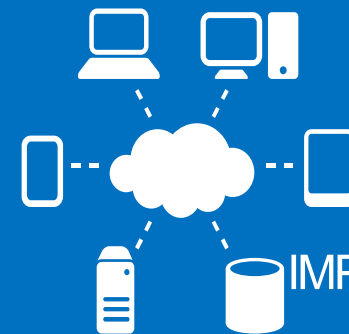
PERSONALIZATION



CHANGES ARE  
HAPPENED  
NOW

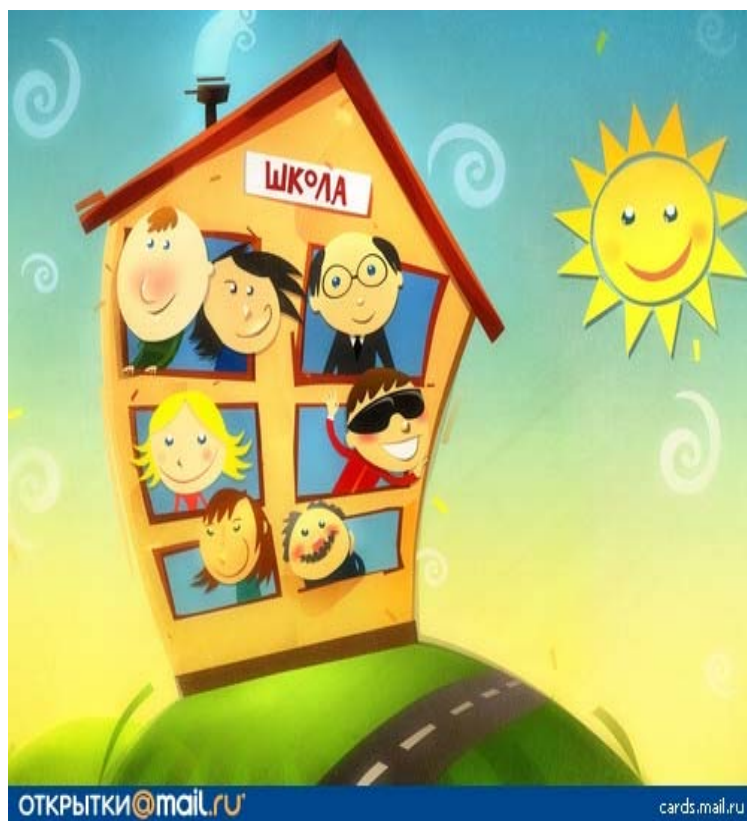


LABOUR MARKET  
SATURATION AND  
ECONOMICAL  
GROWTH



IMPACT  
OF  
TECHNOLOGIES  
TO HUMAN BEING LIFE

## Challenge 1: Which should be educational organizations in the 2030?



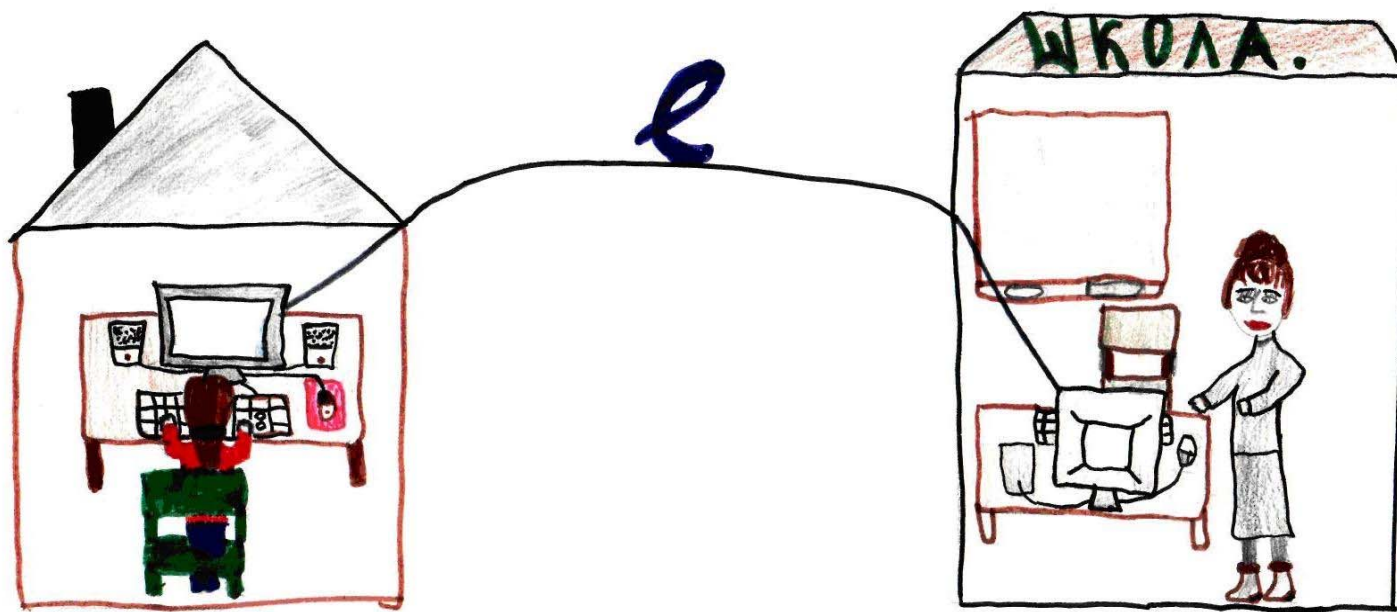
[<http://radodar.ru/?p=1025>].



[<http://caricatura.ru/art/dubinin/url/parad/dubinin/5023/>]

## Vision of our children ...

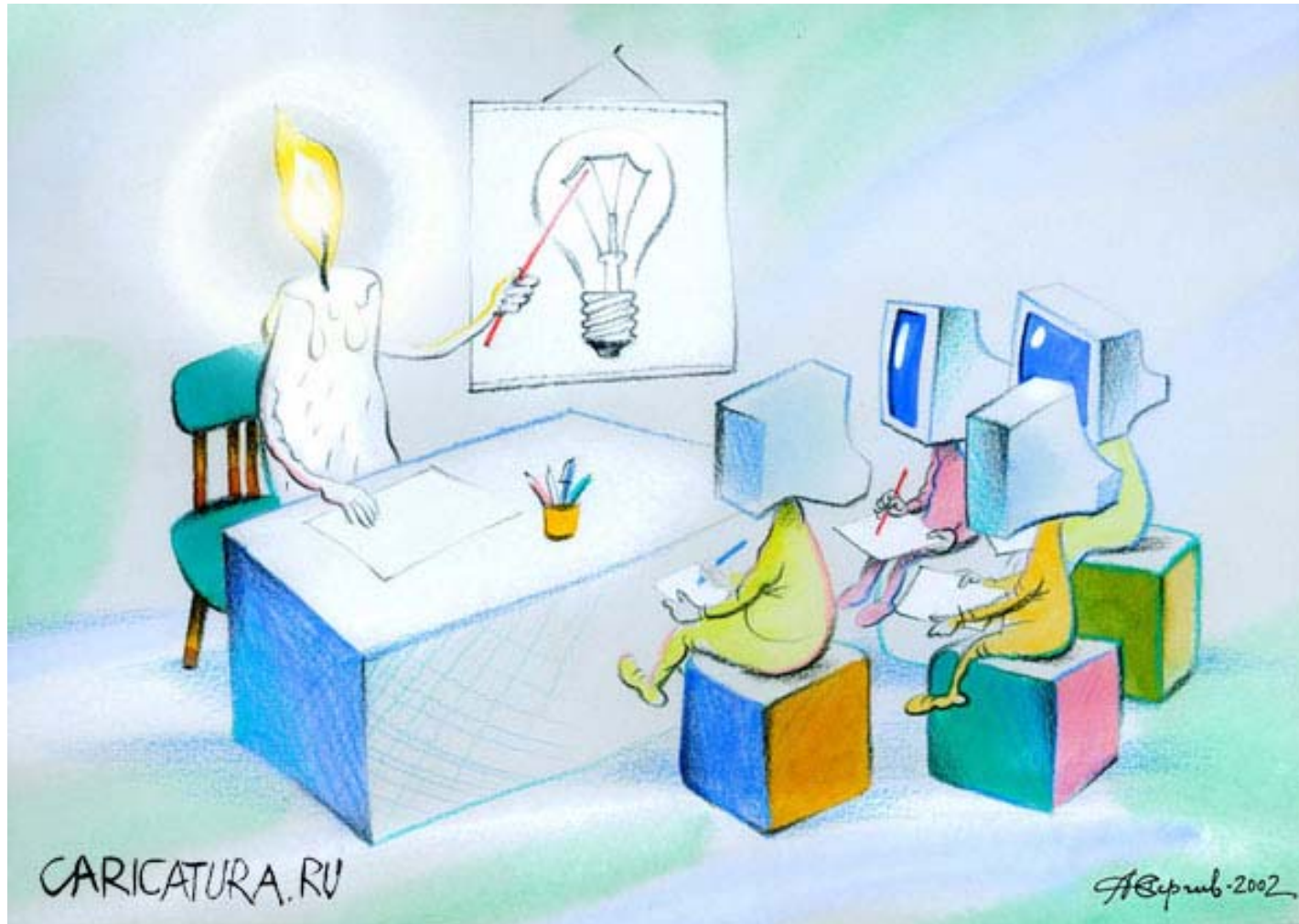
Школа будущего



*Challenge 2: This is a book! Is this a book?*



### Challenge 3: Is learning a light?



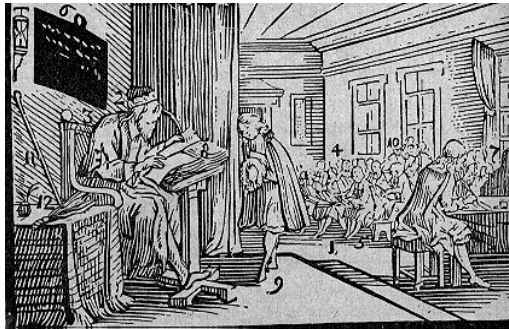
## Challenge 4: Innovations in pedagogy - from/to personalization

### How to combine personalization with multi-massive education?



Socrates,

1:1 but just for a few



XVIII Century

1:M but for Elite



IXX Century

1:M and for many



XX Century

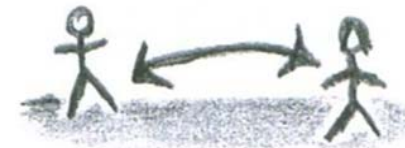
1:MM and massive



XXI Century

1:MMM Multi-massive  
but not personalized yet

**PERSONALIZED LEARNING**

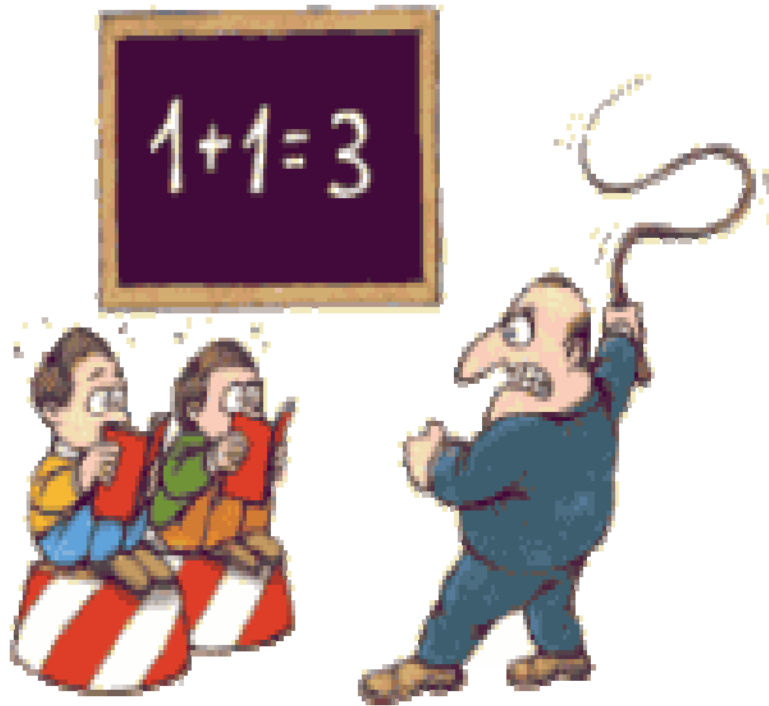


**IS DIFFERENT**



## *Challenge 5: The role of teacher – what's a difference?*

### ***XIX Century Teacher***



[http://andreytv.blogspot.ru/2014/11/blog-post\\_30.html](http://andreytv.blogspot.ru/2014/11/blog-post_30.html)

### ***XXI Century Teacher***



<http://allwantsimg.com/wars-obo>

## *Solution: Changing the role of teacher*

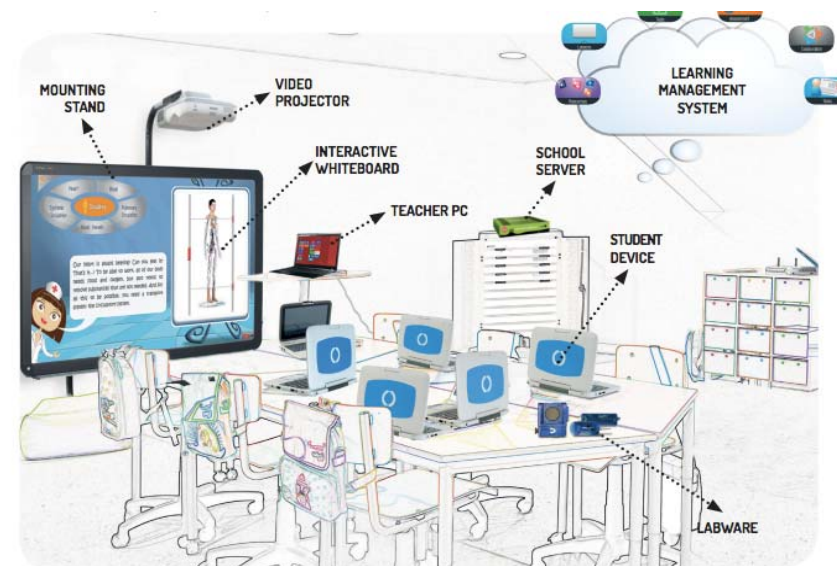
***“Dictatorship”***



***“Democracy”***



## Solution: Collaborative Educational Environments and Flipped Classrooms

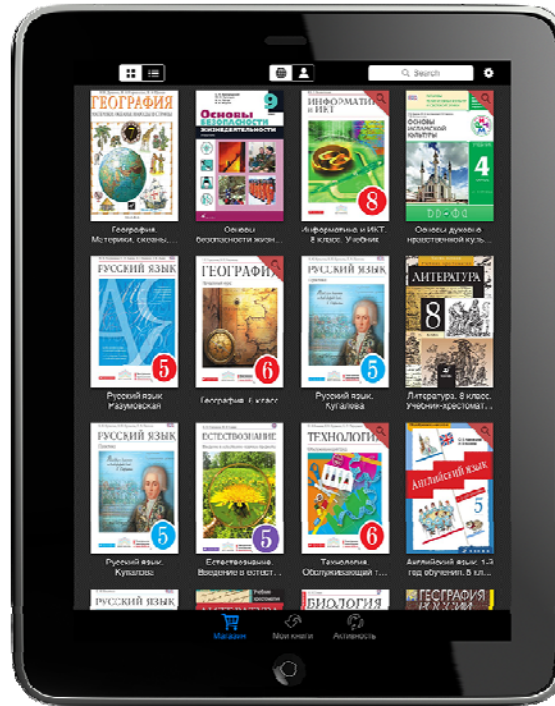


# Solution: New generation of Textbooks

Good Textbooks



Placed in context videos of the best teachers

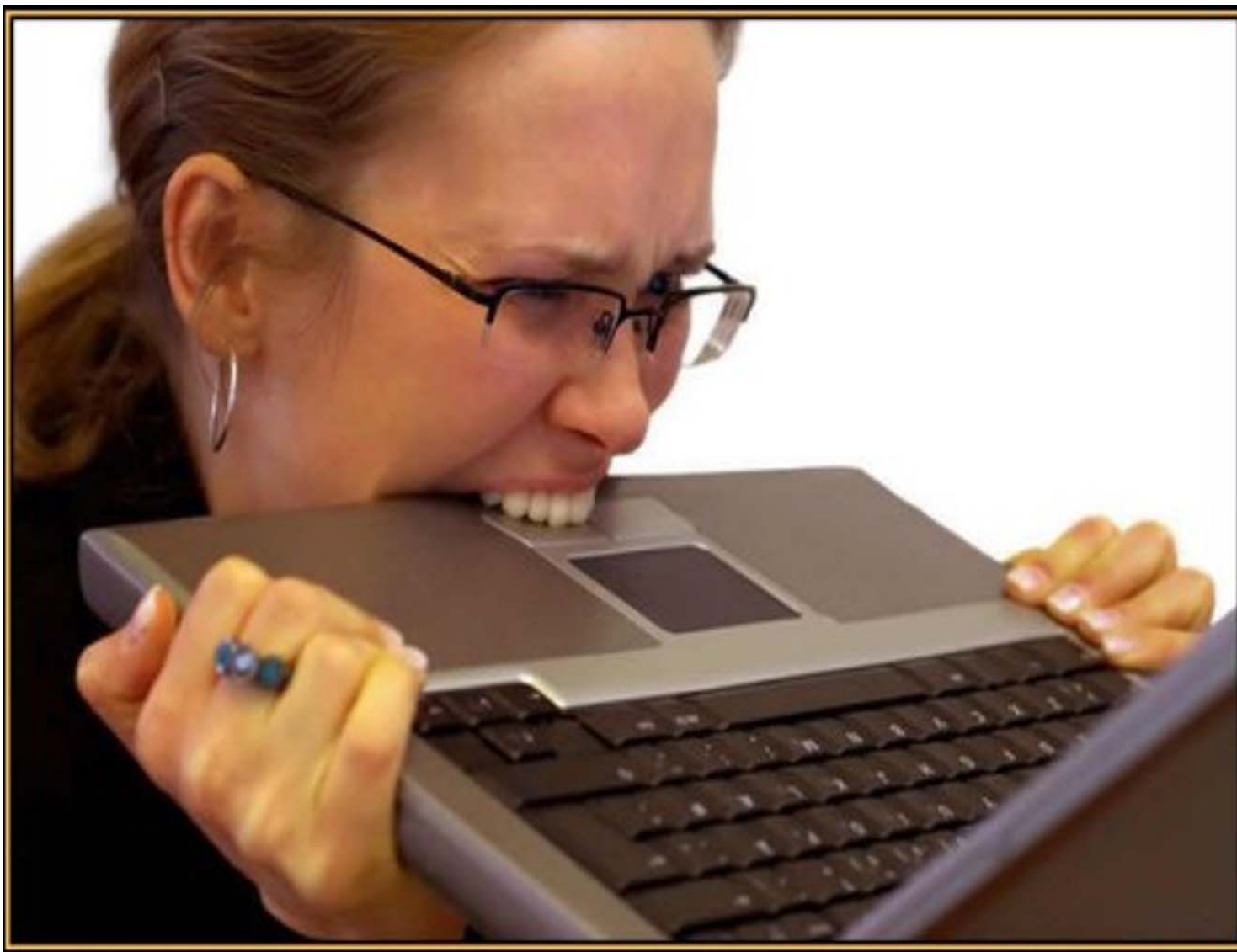


Teaching concept from the “flipped” classroom



**Highly interactive  
New Generation  
Multimedia  
e-Textbooks  
(The “Active” Text-Books)**

## *Challenge 6: Teacher ICT/Digital Competency*



***Why ICT/Digital Competency?***  
***Key competencies of Inclusive Knowledge Society***

**ICT/Digital Competency  
(e-Skills)**



**Professional Competency  
(Hard Skills)**

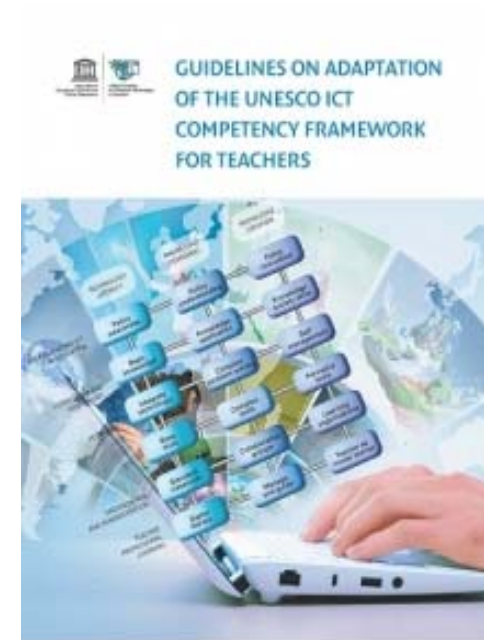
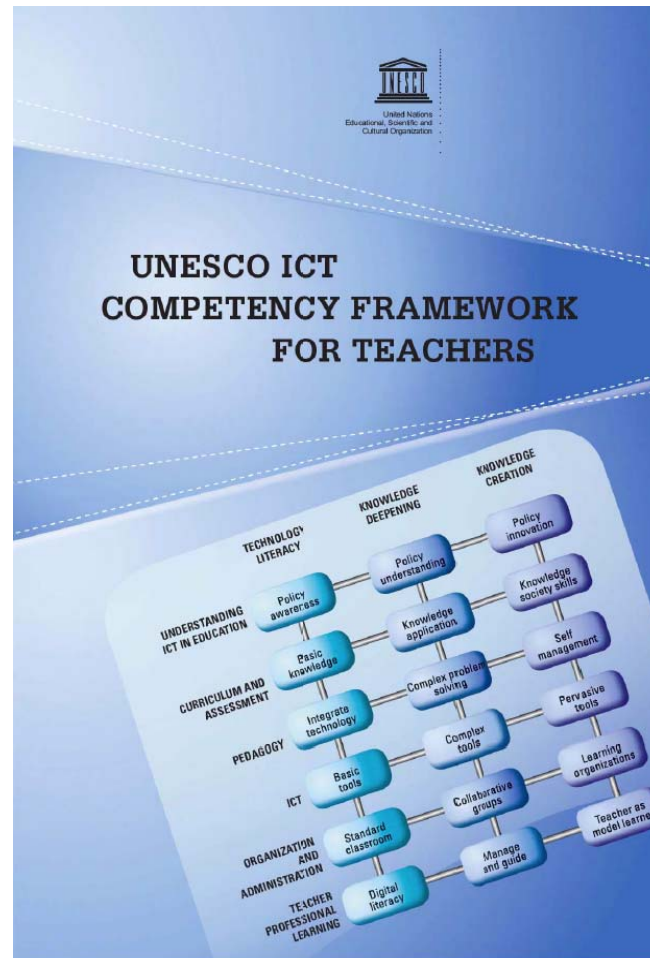
**Social Competency  
(Soft Skills)**

# Solution: Teacher ICT Competency Standards based on UNESCO ICT-CFT

ICT-CFT v 1.0

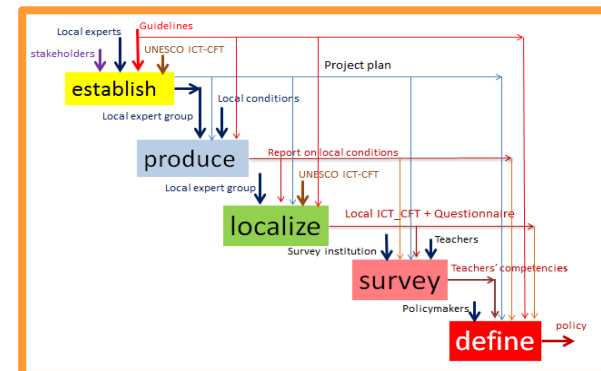


ICT-CFT v 2.0



METHODOLOGICAL APPROACH IN LOCALIZATION OF THE UNESCO ICT-CFT

ICT-CFT v 3.0 – 2017!



*General Challenge:  
ICT in Education – Expired product in new package?*

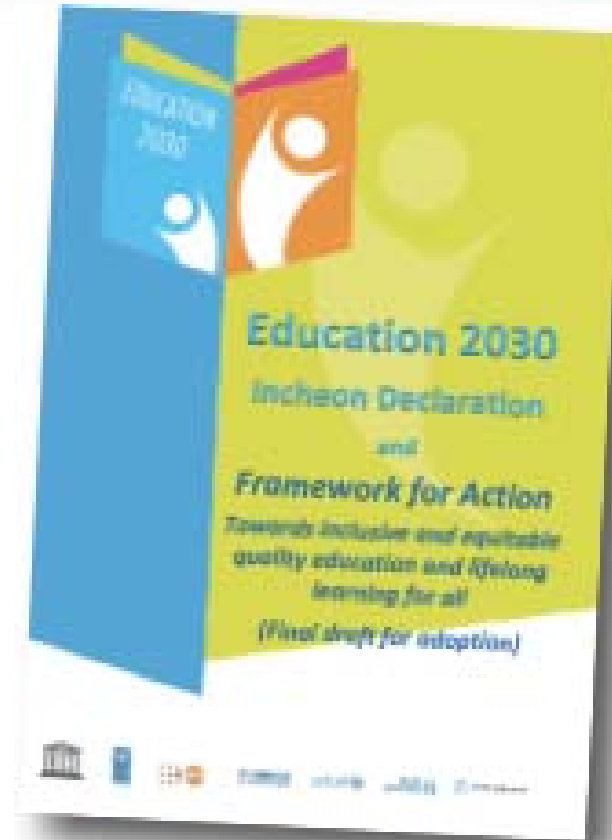




## *General Solution: To integrate ICT and Pedagogy*



## *Incheon Declaration and Framework for Action “Education 2030”*

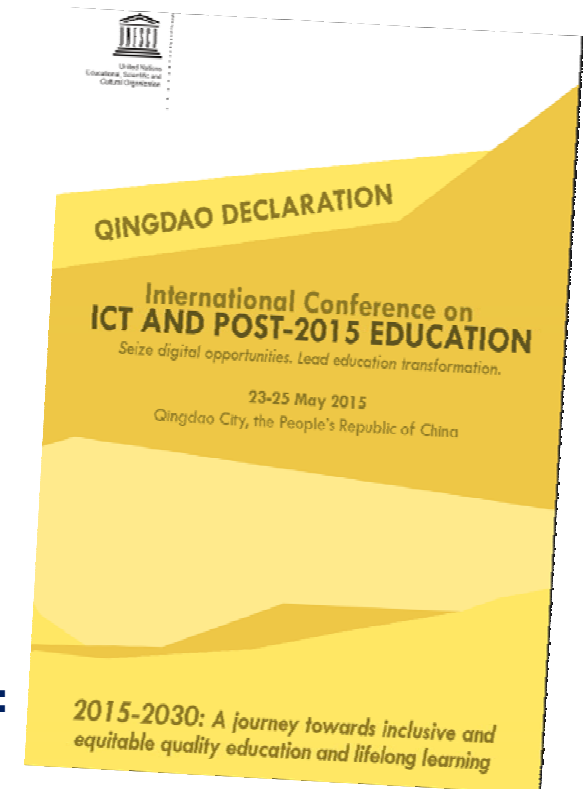


**Ensure inclusive and equitable quality education  
and promote lifelong learning opportunities for all**

## *International Conference in Qingdao (China). Qingdao Declaration*

# INTERNATIONAL CONFERENCE ON ICT AND POST 2015 EDUCATION

*A journey towards inclusive and equitable quality education and lifelong learning*

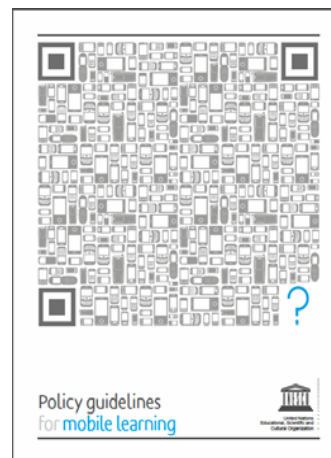
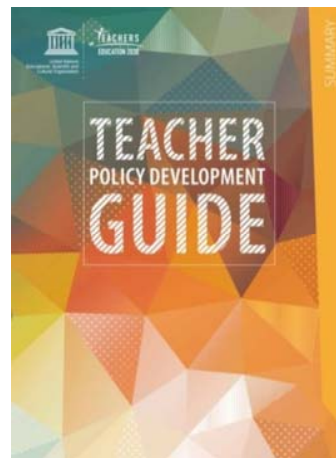
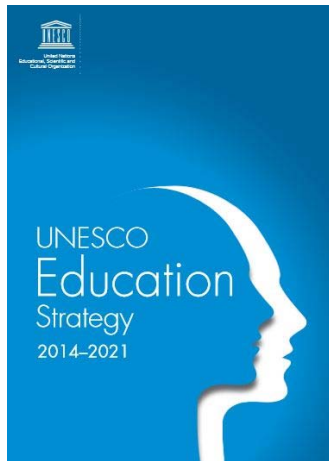


### **Seize digital opportunities and educational transformation:**

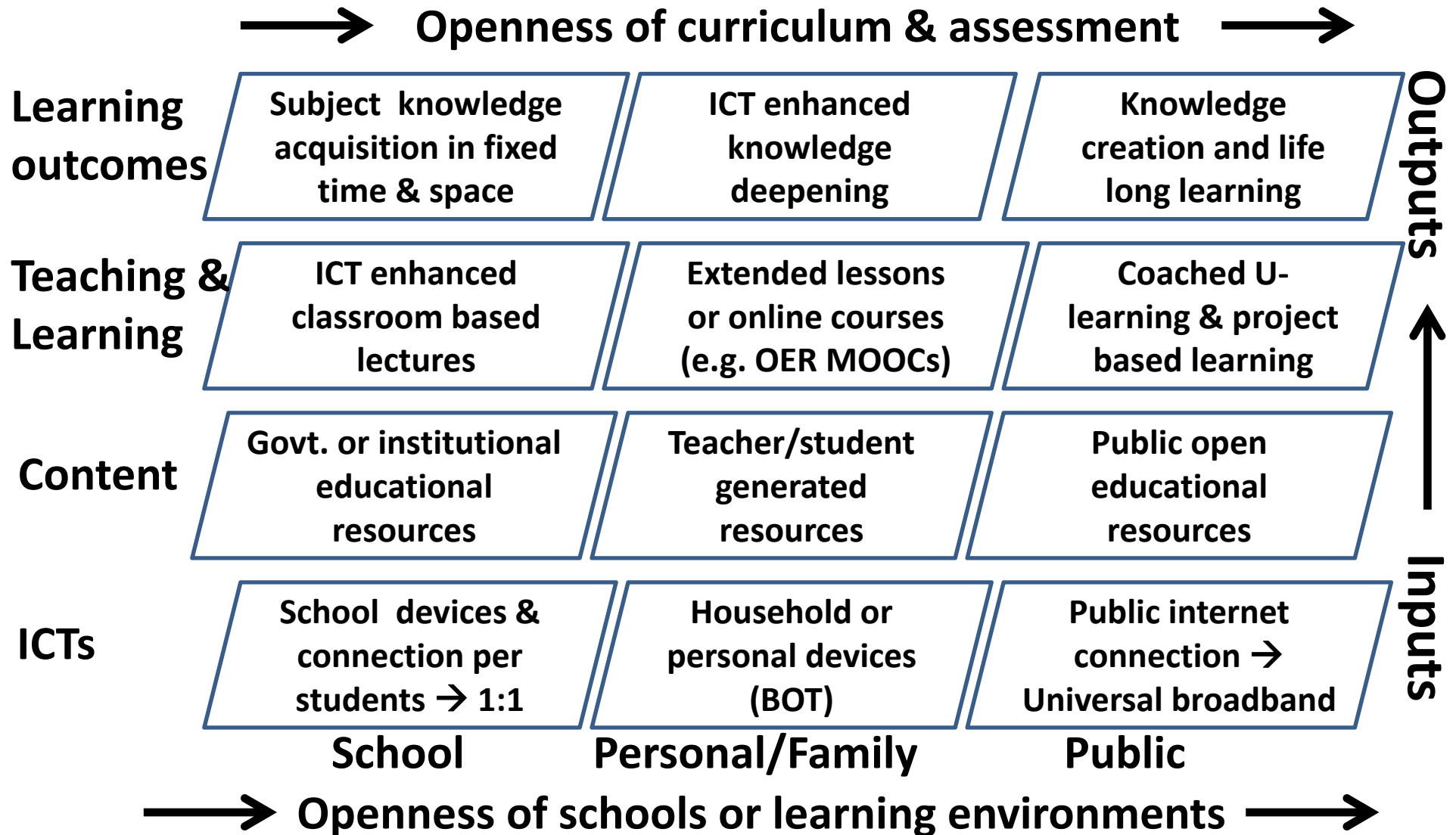
Access and Inclusion, OER and Open Solutions,  
Quality Learning, Lifelong Learning Pathways, Online Learning Innovations,  
Quality Assurance and Recognition of Online Learning, Monitoring and Evaluation,  
Accountability and Partnership, International Cooperation

## UNESCO's Main ICT in Education Activities and Priorities

- Policy
- Teacher training
- Mobile learning
- Open educational resources (OER)
- Monitoring and measuring

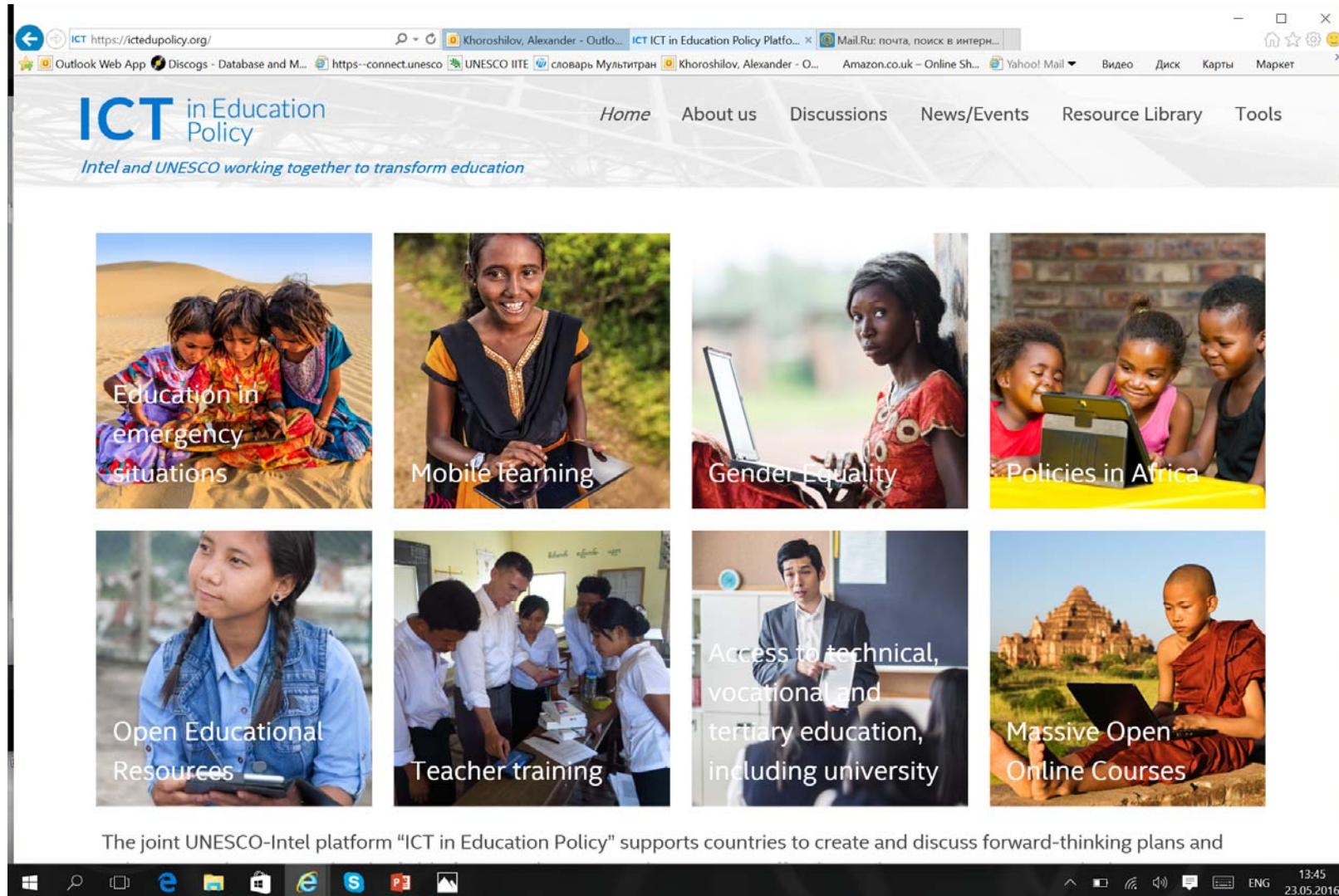


Focus Area	Outputs & Instrument	Capacity	Result
<b>Policy</b>	ICT in Education Toolkits	<ul style="list-style-type: none"> <li>Regional Ministerial Forum on ICT in Edu</li> <li>National workshop on ICT in Education Policy</li> </ul>	<ul style="list-style-type: none"> <li>Africa, Asia, Eastern Europe</li> <li>ICT in edu. policy for &gt;50 countries</li> </ul>
<b>Teacher Training</b>	ICT Competency Framework for Teachers	<ul style="list-style-type: none"> <li>Assisting national teacher ICT standard setting</li> <li>Institutional strategy for teacher training institutes</li> </ul>	<ul style="list-style-type: none"> <li>15 Asian + 8 African countries</li> </ul>
<b>Mobile Learning</b>	<ul style="list-style-type: none"> <li>Policy Guideline</li> <li>Mobile reading</li> <li>Support teachers</li> <li>Women &amp; Girls</li> </ul>	<ul style="list-style-type: none"> <li>Mobile Learning Week since 2012</li> <li>2015: Mobiles Empower Women &amp; Girls</li> </ul>	<ul style="list-style-type: none"> <li>4 countries: test mobiles for teacher</li> <li>2 countries: mobiles for women &amp; girls</li> </ul>
<b>OER</b>	<ul style="list-style-type: none"> <li>OER Declaration</li> <li>OER Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Global/regional advocacy</li> <li>National OER policy</li> </ul>	<ul style="list-style-type: none"> <li>5 national policies</li> <li>2 regional events</li> </ul>



# The joint UNESCO-Intel ICT in Education Platform and Policy Tool

<https://ictedupolicy.org/>



The screenshot shows a web browser window displaying the website <https://ictedupolicy.org/>. The browser's address bar and tabs are visible at the top. The website header features the logo "ICT in Education Policy" and the tagline "Intel and UNESCO working together to transform education". A navigation menu includes links for Home, About us, Discussions, News/Events, Resource Library, and Tools. The main content area is a grid of eight featured topics, each with a representative image and text overlay:

- Education in emergency situations
- Mobile learning
- Gender Equality
- Policies in Africa
- Open Educational Resources
- Teacher training
- Access to technical, vocational and tertiary education, including university
- Massive Open Online Courses

At the bottom of the page, a text block reads: "The joint UNESCO-Intel platform 'ICT in Education Policy' supports countries to create and discuss forward-thinking plans and". The Windows taskbar at the bottom shows the system tray with the time 13:45 and date 23.05.2016.

## *UNESCO IITE. Focus Areas*



**POLICY, RESEARCH  
and TECHNICAL  
ASSISTANCE**

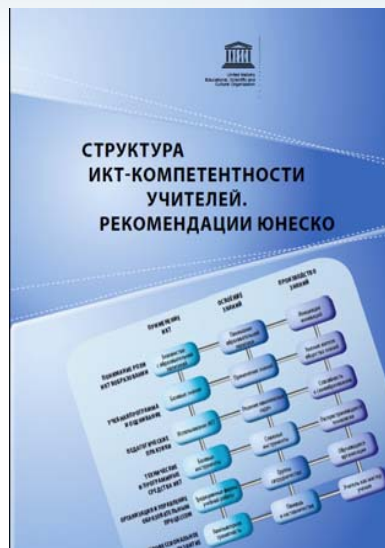
**TEACHER  
PROFESSIONAL  
DEVELOPMENT and  
NETWORKING**

**DIGITAL PEDAGOGY,  
OER and LEARNIG**



# Teachers Competency and UNESCO ICT-CFT

Alternative Translation  
 Promotion  
 Policy Advice  
 Research and  
 Publications  
 Curriculum Development  
 Training  
 Methodology of  
 Implementation  
 Guidelines  
 Technical Assistance  
 Standard Setting  
 Projects  
 Working and



*Policy Brief*  
October 2010

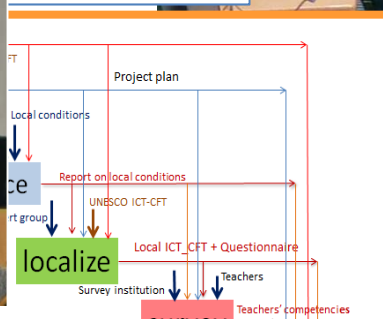
**ICT FOR INCLUSION: REACHING MORE STUDENTS MORE EFFECTIVELY**

**CONTENTS:**

- Context and outline of the problem
- Types and benefits of ICTs for education
- Critique of policy options
- International law
- Current national policy approaches
- Policy recommendations
- Key stages for policy development
- Support for practice
- Curriculum development
- Stakeholders and consultation
- Research in support of evidence-based policy

**CONTEXT AND OUTLINE OF THE PROBLEM**

The World Bank estimates that between 10 and 12 per cent of the world's population has a disability. Based on this, the numbers of children under the age of 14 with disabilities is estimated at between 180 to 190 million. Only one million children of primary school age worldwide have a disability. They face significant and complex barriers to accessing education, as a result their school attendance and completion rates are much lower than those of their peers. Of the 75 million children out of school worldwide, one third are children with disabilities. In total an estimated 186 million children with disabilities have not completed primary school education. In developing countries, exclusion from education is "particularly more serious among persons with disabilities, of whom approximately 97 per cent do not have reading and writing skills."



**GUIDELINES ON ADAPTATION OF THE UNESCO ICT COMPETENCY FRAMEWORK FOR TEACHERS**



## Curriculum Development and Training

International Master Programme “ICT in Teacher Professional Development”

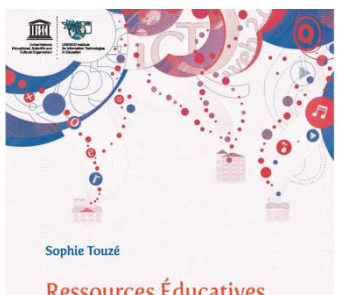
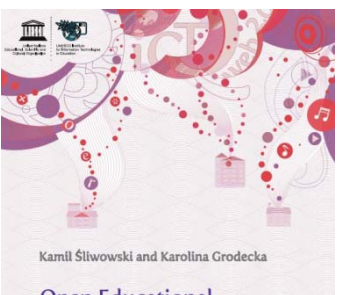
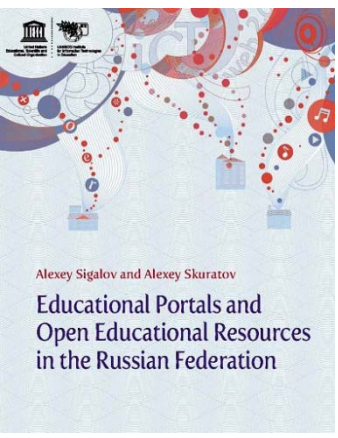
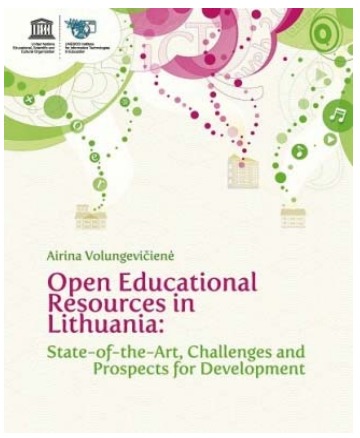
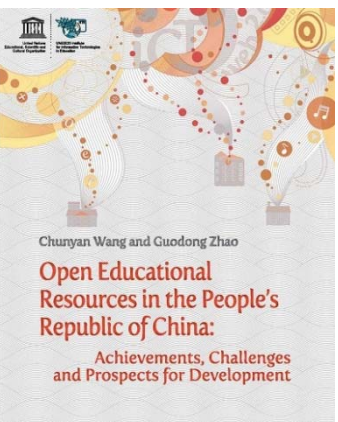
Joint training courses for teachers with IITE partners – leading ICT vendors

IITE on-line training courses for teachers

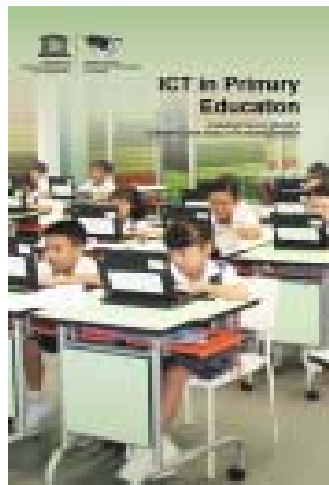
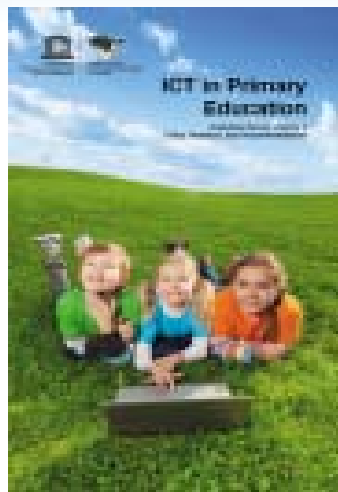


# Open Educational Resources

ITE project “OER in non-English-speaking countries” covered 19 countries



## Learning Materials and MOOCs



## *New IITE Flagship Project : Foresight in ICT in Higher Education*





United Nations  
Scientific and  
Organization



UNESCO Institute  
for Information Technologies  
in Education

The informational workshop  
“Digitally Competent Educational Organizations”

Ministry of Education, Culture and Sport of Spain  
Madrid, May 24, 2016

**UNESCO IITE**  
**invites you for cooperation in**  
**the field of ICT-integrated**  
**pedagogy to reach the targets**  
**of Education-2030 !**

*Professor Alexander Khoroshilov, PhD*

Head a.i. of UNESCO IITE

