



## Human Capacity Building and Institutional Strengthening: Issues, Challenges and Opportunities

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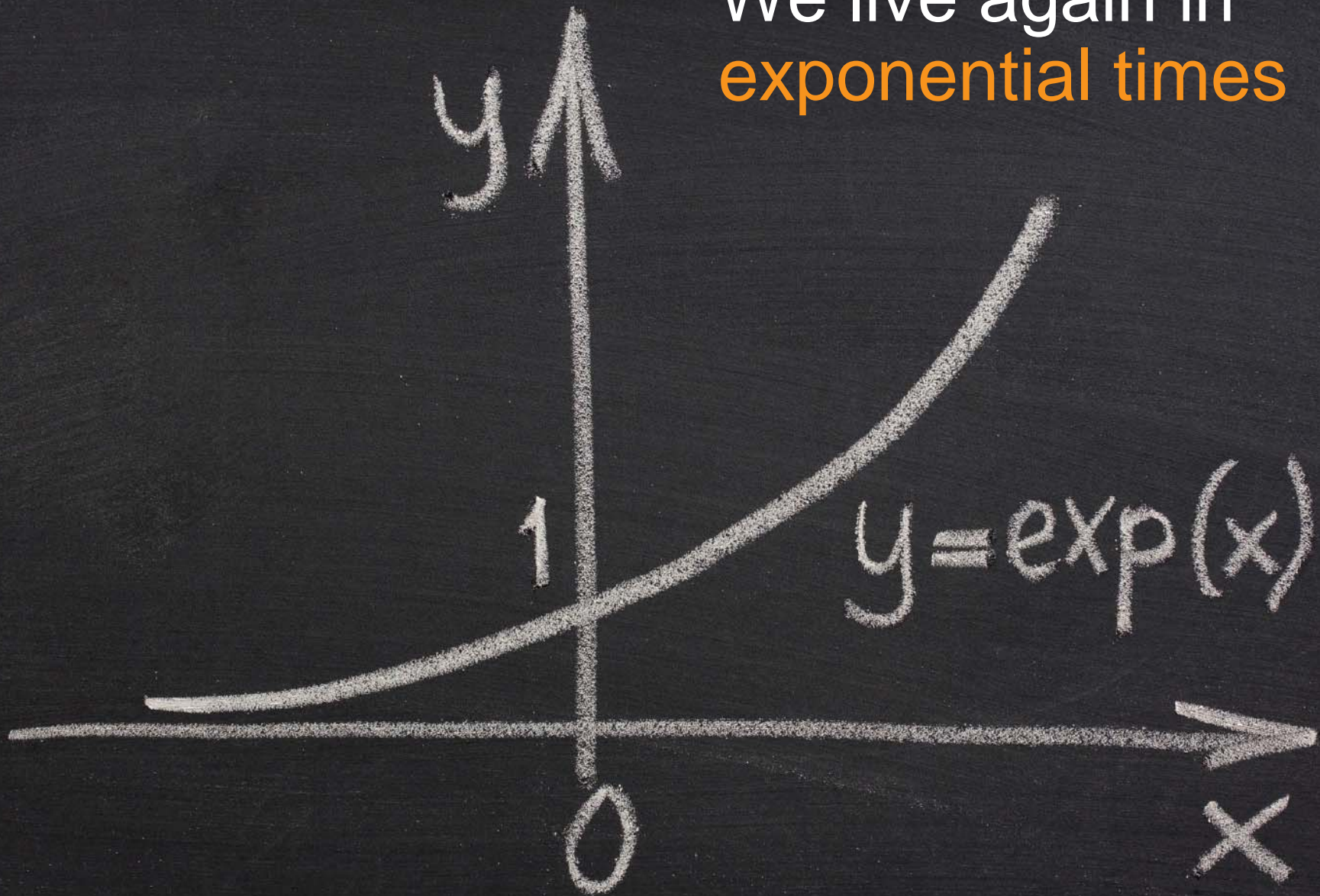


# “Technology is not kind”

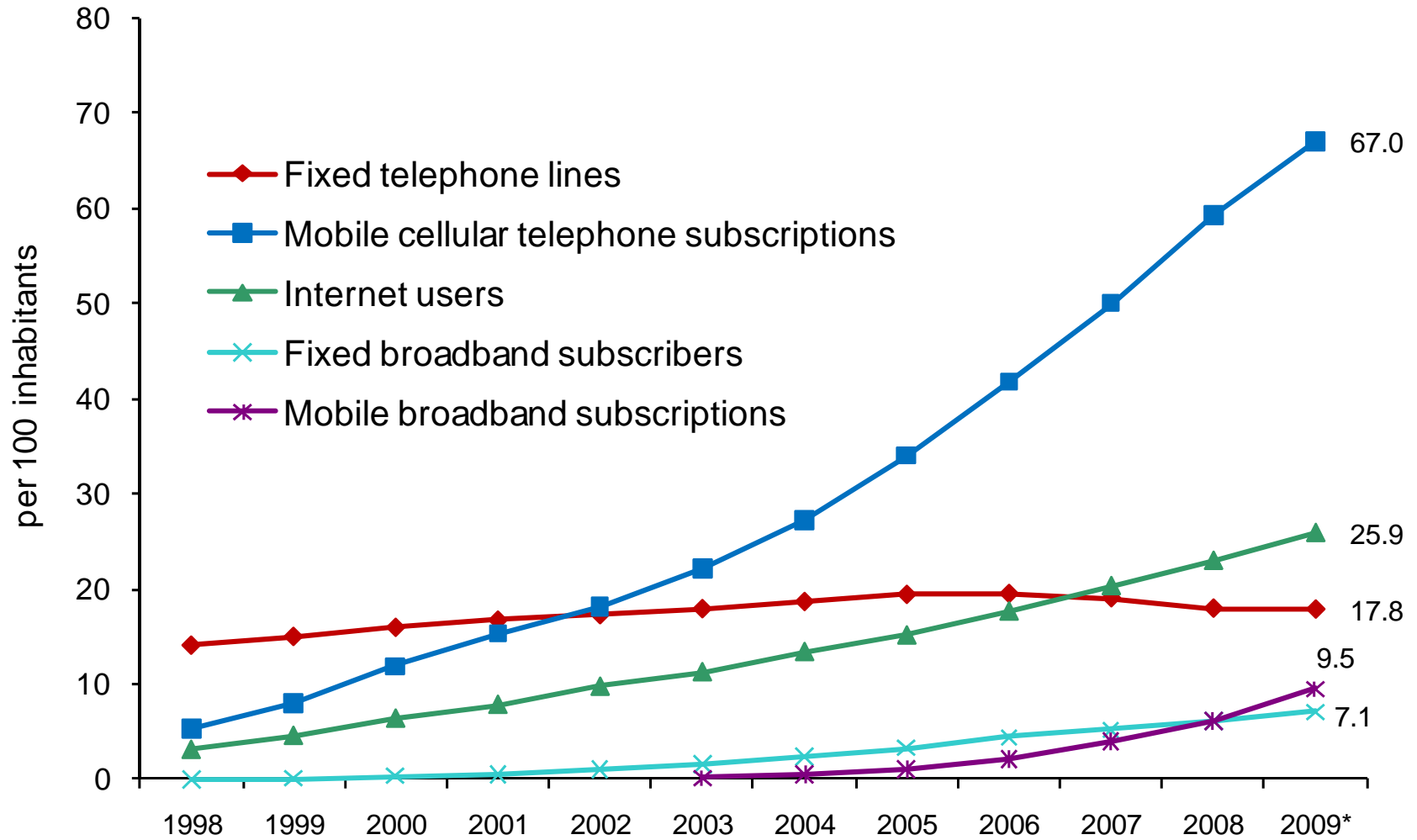
Joseph Alois Schumpeter (1937)



We live again in  
exponential times



# 11 years of Global ICT Developments: 1998-2009



Source: ITU

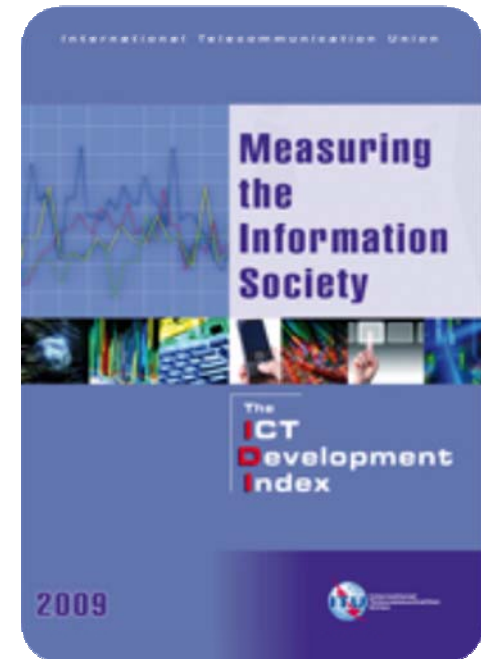


“to become fully-fledged members of the Information Society... depends largely on increased capacity building in the areas of education, technology know-how and access to information, which are major factors in determining development and competitiveness”

# ITU ICT Development Index (IDI)

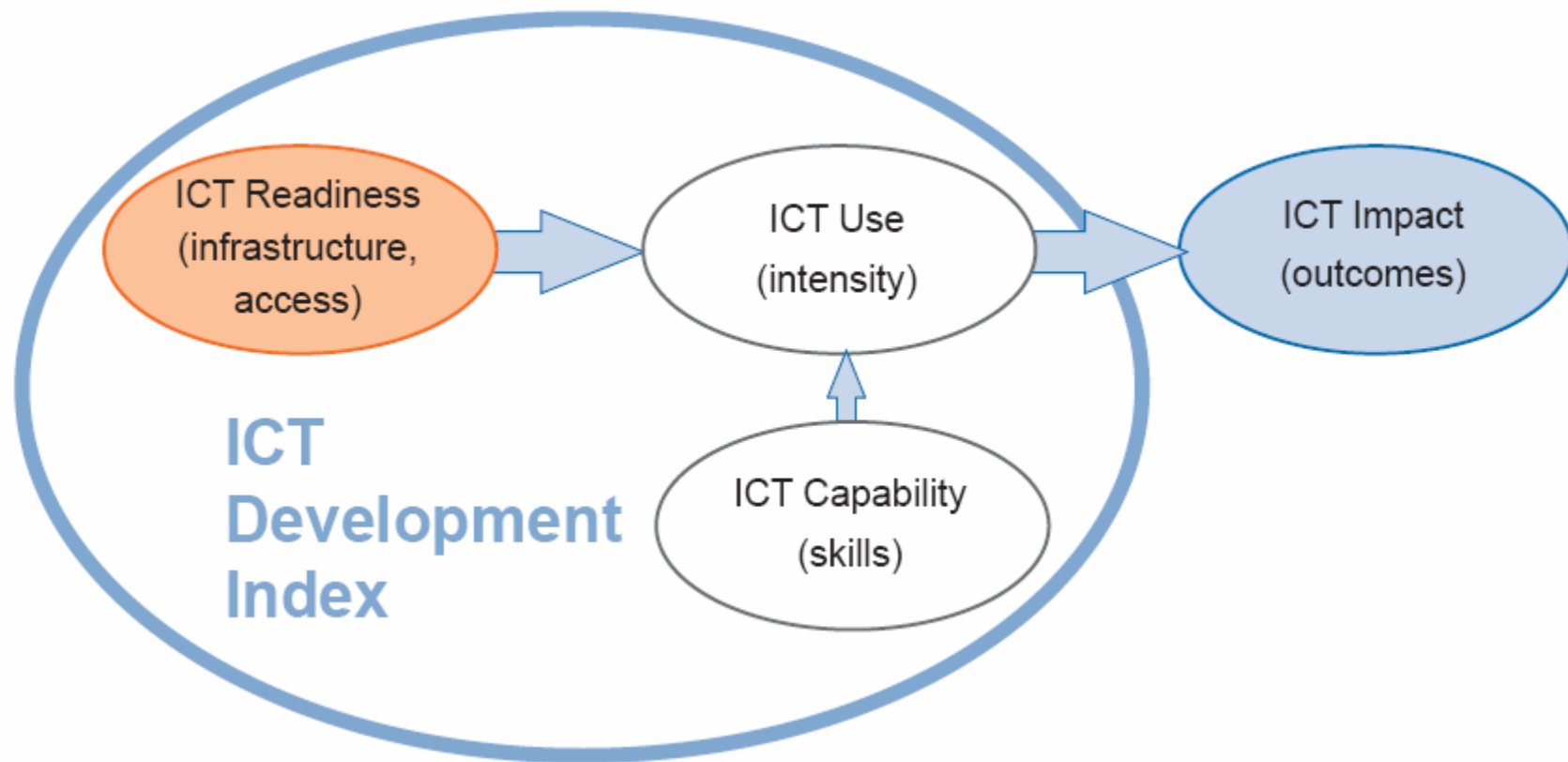
Captures level of advancement of ICTs in more than **150 countries**

Tool to **benchmark** Information Society developments



# ITU ICT Development Index (IDI)

Three evolution stages towards Information Society



ICT access  
+ capacity building

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= broad benefits

# Telecommunications is part of a broader ICT ecosystem

**Making possible surprising and disruptive devices, services and applications...**

- Wikipedia
- iPhone
- Consumer empowerment
- M-Pesa
- mPedigree

# Mobile as Critical Infrastructure Platform

- In some developing countries, there are more mobile banking accounts than traditional bank accounts (e.g., M-Pesa with 7 million users in 18 months)
- Mobile operators are major contributors of tax revenues averaging 7% of tax receipts in Africa
- mPedigree tackles fake drugs in Africa
- Will emerge as significant capacity building platform (e.g., mobile e-learning, video learning)



and build specialized ICT skills

Further efforts needed to raise ICT literacy

## Specialized Skills



Policy and regulatory

ICT business and management

Programmes for technical and operational staff



What's the ITU  
doing to help?

# ITU Development Sector Activities

Enabling Environment

Infrastructure and Access Technologies

Cybersecurity and ICT Applications

Emergency Telecommunications

Statistics and Market Information

Regional and Special Initiatives

Capacity Building



## More specifically...

Analogue-digital migration  
Broadband wireless access  
Cybersecurity  
Competition and price regulation  
Convergent regulation  
Emergency communications  
IPTV and Mobile TV  
National ICT strategies  
Next generation networks  
Regulatory reform  
Rural access  
Spectrum management  
Spectrum pricing/trading  
Universal access

and more...





- ITU Development Sector initiative to make available ICT education and training opportunities at highest possible levels of quality
- With partners (e.g., ITU Centres of Excellence and Internet Training Centres), delivers education and training opportunities around the globe through face-to-face events and distance learning
- Formal partnerships planned with academic and training institutes to develop academic curricula to assist building ICT instructional institutional capacity



<http://academy.itu.int>



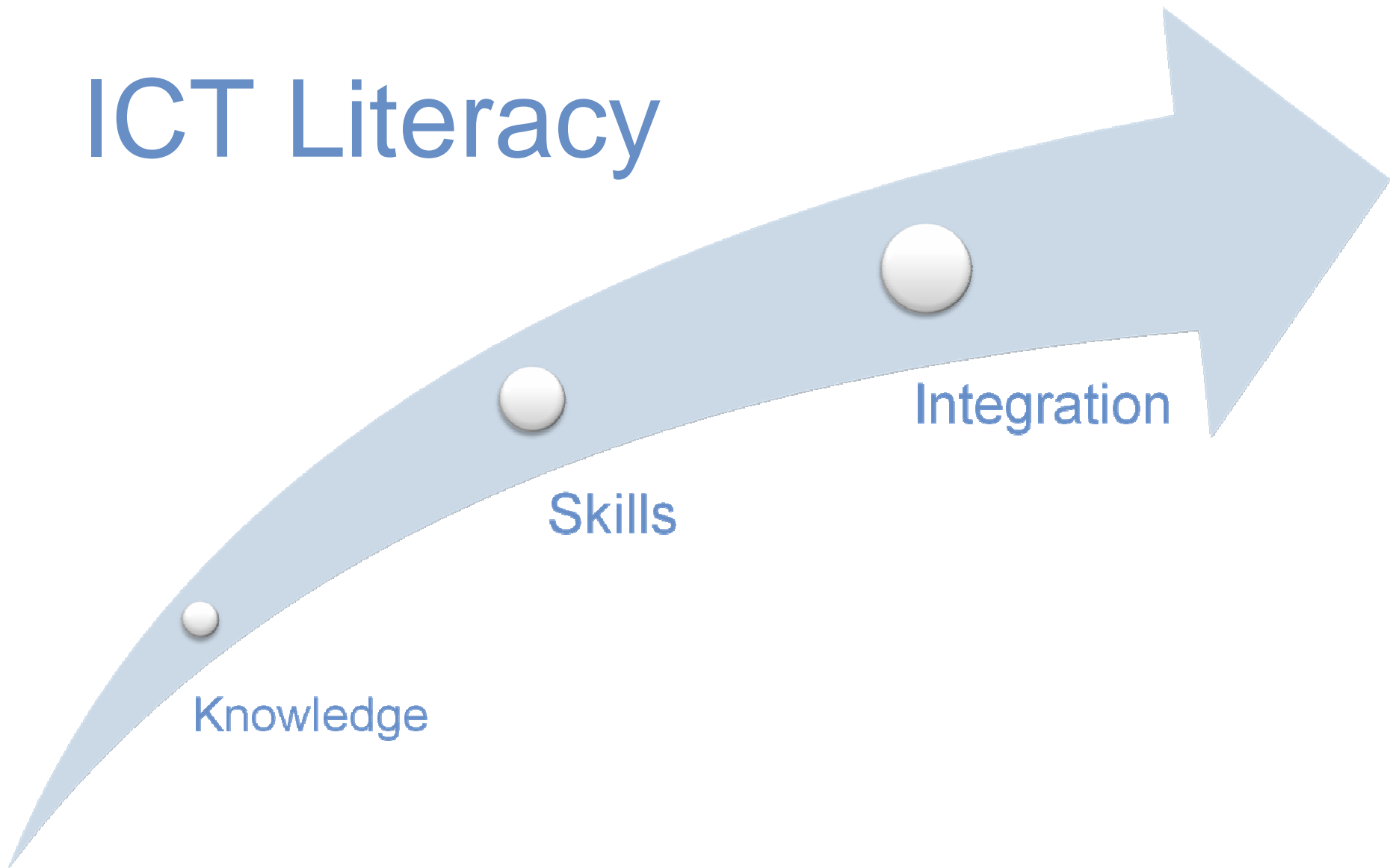
Instructional Materials for

**foundational knowledge | face-to-face | e-learning | blend  
self-learners | instructors**

# ITU Centres of Excellence Networks and Internet Training Centres



# ICT Literacy



# ICT Literacy and Educational Institutions

- ICT literacy needs to be integrated into standard educational curricula
- Top ten “in demand” jobs in developed country labour markets often did not exist as recently as ten years ago
- We are trying to educate students for jobs that don’t yet exist
- ICT industry often complain graduates don’t have necessary skill sets
- Better partnerships between industry and educational institutions crucial



# ICTs are Fundamentally Changing Learning

- Open University Open Learn (OU)
- MIT Courseware
- YouTube EDU
- iTunes U
- Project Gutenberg
- WikiEducator
- WikiBooks
- Wikipedia
- University of the People

# Explosion in Learning Tools



**Growth in free and open source learning tools such as Moodle**

**Web 2.0 social networking and collaboration tools support learning process**

**Growth in bandwidth supports video learning**

# Recommendations



ICT literacy initiatives in educational curricula



Standardized ICT curricula, certification, accreditation



Training partnerships with ICT industry



Open and distance learning, OER



National school connectivity plans



Coherence: coordination between education, communication and other policy makers

Q & A