Internet & Education: Teacher Education in Sub Saharan Africa

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Commonwealth of Learning
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Mission:

To help Commonwealth governments and institutions use various technologies to improve and expand learning for development.
COL Programmes

**Education**
- Open Schooling
- Teacher Education
- Higher Education
- Virtual University for Small States of the Commonwealth (VUSSC)

**Skills**
- Technical and Vocational Skills Development
- Lifelong Learning for Farmers
- Healthy Communities
- eLearning

**Crosscutting**
- Gender equality
What works

Which ICT related **capacity development strategies** in education do work - and which do not? What are the lessons learned?
Good news for Internet & education

- Research indicates Internet has huge potential to benefit classroom practice

- Price of ICT devices has come down

- Mobile phone access has grown tremendously – 65% of households in 23 countries had 1 mobile phone in 2013 (Gallup)
Good news for Internet & education...

- More affordable bandwidth
- Growing local content
- Many governments in Africa have put ICT and/or ICTs in Education policies in place
- Variety in education models - ICTs central to many of these models
What works

Which ICT related **capacity development strategies** in education do work - and which do not? What are the lessons learned?
Open Educational Resources (OER)

- www.open.edu/openlearn/
- http://www.tessafrica.net/
- https://www.khanacademy.org/
- http://www.oerafrica.org/
- www.africanstorybook.org/
- http://ocw.mit.edu
- http://www.oerafrica.org/
OER

Various projects on integrating OER

To meet demand for quality learning materials & to improve quality of teaching/learning

A number of Open textbook initiatives

To support teacher training and support
Enabled sharing of quality materials for teachers across many countries in SSA (75 modules)

Materials available in English, French, Arabic & Swahili

Promoted networking among teachers – 300,000 teachers benefited

Improved personal learning of teachers

Sustainability & institutionalization an issue
“Where steady, flexible and affordable access to ICTs is enabled, TESSA OER uptake and use has been high”

(Harley & Barasa 2012)
Open Resources for English Language Teaching (ORELT)

- OER for teaching of English language in lower SS
- Materials collaboratively developed
- Made available online, printable & on DVD mode
- Piloted in Ghana, & Uganda planning to use
ORELT in Kenya

Trained trainers who are now training other teachers

Materials being vetted by KICD for use across the country

Not clear yet how if approved materials will be made available to all the teachers
Stories for literacy development

So far 158 stories in English & 19 other African languages

Allows users to download and read; & create own stories
Massive Open Online Courses (MOOCs)

- Potential to provide high quality courses

- MOOCs seem to be reaching the ‘converted’

- Enrolment in MOOCs in Africa still very low

- No institutions in Africa running MOOCs

- COL working with institutions in developing countries
MOOC Platforms

Global Statement 2014: http://bit.ly/1x9rF2g
Coursera Participation

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Lessons from OER & MOOCs

- Collaborative efforts help in generation of content
- Ensure relevance to well defined needs
- A lot of skill still required for both integration & generation
- Policies are needed – national & institutional
- A lot of sensitization still needed
- OER initiatives done well on provision BUT not so well on use
- For MOOCs explore issues of certification
Use of mobile technologies
Commonwealth of Learning - APTUS

Classroom without walls

APTUS – Classroom without walls

APTUS is an off-grid, offline virtual classroom enabling content sharing & learning interaction

- Mini PC with a large number of learning materials
- A wireless router, enabling a number of learners with tablets, laptops, or mobile phones and devices
- Total cost US$100 & has been tested in 15 sites in 20 countries
- More research is still required
Other initiatives

- Commonwealth Certificate for Teacher ICT Integration (CCTI)
- Promotion of school or teacher networks e.g. SchoolNet
- E learning courses in tertiary institutions
What needs to be done?
Remember these issues still remain

- Availability and affordability of technology
- Broadband still too costly for vast majority
- Vast majority of people still unconnected - 80%
- ICT skills development still a challenge
- Growing power and influence of social media and social networks e.g. Africa estimated to have 100 million social networking accounts (Dalberg)
What needs to be done

- More holistic approach - bandwidth, hardware, content, and training
- Greater collaboration
- Institutionalization of projects – for sustainability of initiatives. Move beyond project life
- Integrate other technologies – e.g. mobile enabled solutions
What needs to be done...

- Enabling policies – national & institutional along with commitment of funds

- Continued investment in both core infrastructure & core conditions of use of technology

- Greater involvement of the private sector
What needs to be done

Research - We need evidence. How does ICT affect how we learn? Which technologies give the greatest benefits in given environments? What role does social media play in promoting quality learning?...

A lot more work from the demand - more support for use, adaptation & sharing
How do we approach the mismatch
How to deal with mismatch

Reimagining education for the 21st century

In the age of the Information Revolution, when the ability to “think outside the box” is given major importance, how can schools train their students to break out of the “box” that stifles creative thinking?

Tony Wagner, expert in residence at Harvard University’s Innovation Lab, has had a long career in education and is one of the speakers at the World Innovation Summit for Education taking place in Doha, Qatar, Nov. 4-6. Rather than focusing on the vague concept of creativity itself, he prefers to talk about educating students for creative problem-solving. Everyone, he says, not just those born with a special talent, is capable of creative problem-solving, a capacity that can often be atrophied by traditional teaching techniques that stress memorization and multiple-choice tests.

Today, Wagner points out, young people grow up — assuming they are encouraged — their interests can become passions. “In the pursuit of those passions, with maturity, I find that quite a number of young people want to make a difference, want to make a contribution,” says Wagner. “That is part of a larger sense of purpose.”

How can teachers tap into and encourage students’ creative problem-solving skills? First of all, he says, by not teaching packaged curricula or for standards tests, and by engaging students in a variety of projects and ongoing conversations about important topics, asking them large questions and giving them choices in the curriculum.

Schools, he adds, could also offer “Google time,” based on the idea of the Google rule — the company’s employees have permission to use one workday a week for “play” and can choose the projects they want to work on. What people they want to work with, which of many of the

World Innovation Summit for Education - Doha, Qatar 4th - 6th Nov
Statements attributed to Tony Wagner - Harvard University
How to deal with mismatch...

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Schools, he adds, could also offer “Google time,” based on the idea of the Google rule — the company’s employees have permission to use one workday a week for “play” and can choose the projects they want to work on and the people they want to work with, which has led to the development of many of the company’s most innovative products. “Translating that into the classroom, teachers today are beginning to understand the importance of giving a percentage of time for kids to find a pursuit that is of the greatest interest to them,” Wagner explains.
Transformation of Teacher education

- Skills of teacher trainers
- TIEs Curricula
- Technology used in TEIs
- Methodology used in TEIs
- Partnerships built (schools, districts, TEIs...)
- Research

http://bit.ly/1o7BV2x
Transformation in Assessment strategies

Assessment drives teaching instead of being used to facilitate learning

Transform assessment - what, how and when it is used?

Promote partnerships in education

- School – school
- School & community
- Integrate internship/ apprenticeship/ fieldwork
**Food for thought**

Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.

*Bill Gates*