Acceleration of Girls' Education and Rights to Ensure Sustainable Gender Empowerment through ICTs

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The status of girls' and women's education

The good news:

- 84 million fewer out of school children and adolescents since 2000 – 52 million are girls

- 26 more countries achieved gender parity in both primary and secondary education from 36 in 2000 to 62 in 2015

YET …

- 31 million girls out of primary school in 2012 – 51% are expected to never enroll

- 34 million adolescent girls in lower secondary

- Among low income countries, 20% achieved gender parity at primary level, only 10% at lower secondary level and just 8% at upper secondary level

- 774 million adults lacked basic literacy skills in 2012 – 2/3 were women (rate unchanged in the last two decades)

Why the persistent gender gap?

- Girls and women are subject to chronic and systemic discrimination in all aspects of their lives

- Multiple and overlapping reasons, both within and outside the school: socio-cultural, economic, political, religious/attitudinal, institutional, legal :
  - o poverty
  - o geographical isolation (e.g. remote rural areas)
  - o stereotyping and expected gender roles (e.g. early marriages and pregnancy, looking after house or family)
  - o schools not responding to the needs of girls (e.g. learning, physical, socio-emotional)
  - o discriminating education laws, policies, contents, pedagogies, teaching and learning approaches
  - o GBV and SRGBV

It gets worse at secondary education

Secondary education corresponds to "adolescence", during which:

- girls experience a wide range of physical and psychological changes that create different needs but they also expose them to various forms of discrimination and violence, both in and out of school

- gender roles and expectations become more prominent during this time

Qingdao Declaration
International Conference on ICT and Post-2015 Education
(May 2015, Qingdao, China)

"To achieve the goal of inclusive and equitable quality education and lifelong learning by 2030, **ICT must be harnessed** to strengthen education systems, knowledge dissemination, information access, quality and effective learning, and more efficient service provision."

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Girls' education – what role for ICTs?

ICT learning…

- can help overcome some of these barriers
- can be harnessed to strengthen the **provision** and **quality** of education and improve **access** to education for girls
- has unique features:

  - portability

  - relative affordability

  - discreteness

  - potential content richness

  - wide-use and increasing social acceptability

  - one-to-one learning advantages

  - online learning opportunities

Improve administration

Education provision and administration

ICT can make education planning and administration more efficient and effective

- Data storage

- Knowledge management

- Decision making

- School administration and management

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Improve access

YouthMobile – Young female students from the UNRWA Refugee School learning mobile apps development, Ramallah, Palestine
19 May, 2014
© UNESCO/Abel Caine

Improve access

- Increased access to school, especially in remote areas and among disadvantaged groups

- Informal and community-based learning (e.g. Bluetooth broadcasting to women and men on Ebola – Sierra Leone; apps for adolescent mothers to identify resources such as learning opportunities, financial aid or support networks)

- Inter generational opportunities for literacy and numeracy and community development

- OER – accessible by all can help overcome the shortage of textbooks in resource-poor environments

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Support teachers

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Support Teachers

- Improve quality of initial teacher education: ICT skills and competencies; teaching abilities

- In-service training: integration/school-based training; enhance professional development

- Enable the creation of teacher networks (e.g. peer learning, sharing)

- Help raise the social status of teachers#

- Raise gender awareness and promote gender-sensitive teaching approaches

Learning process and content

Learning process and content

- Enrich learning experience: transform classrooms with ICT devices (tablets, satellite TV, internet)

- Better learning resources, adopted to local needs, culture, language, (e.g. digital content, online, offline/DVDs)

- Promote peer learning within school and country or other countries (e.g. apps to prevent violence against women, mobile safety)

- Adoptable and flexible content (e.g. mobile software allowing more appealing and gender-sensitive access to textbooks; customizing certain topics for girls (SRHR); helping adolescent mothers to identify resources such as learning opportunities

- Participation in content creation

UNESCO's Mobile Learning Programme
1. Literacy

Mobile Reading: promoting new ways of reading and accessing reading instructions and materials and advancing literacy education

A promising tool for promoting literacy

BOOKS ARE SCARCE

MOST PEOPLE IN SUB-SAHARAN AFRICA DO NOT OWN A SINGLE BOOK

SCHOOLS IN POOR COUNTRIES RARELY PROVISION TEXTBOOKS

LIBRARY PER POPULATION RATIO

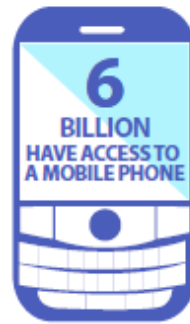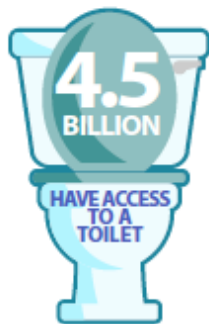1 : 15,000 — UNITED KINGDOM

1 : 1,350,000 — NIGERIA

BUT MOBILE PHONES ARE EVERYWHERE

7 BILLION PEOPLE ON EARTH

4.5 BILLION HAVE ACCESS TO A TOILET

6 BILLION HAVE ACCESS TO A MOBILE PHONE

CELLULAR NETWORKS REACH OVER 95% OF THE WORLD'S POPULATION

UNESCO's Mobile Learning Programme
2. Policy

- Strengthening national capacities to develop and implement ICT policies in education, particularly through harnessing mobile technologies

  - Facilitating policy dialogue (e.g. Qingdao Conference on ICT and Education 2030/ Qingdao Declaration)

  - UNESCO ICT in Education Toolkit (www.ictinedtoolkit.org)

  - Training of policymakers (1000+ in 50+ countries)

  - Integrating mobile technology into holistic policies and strategies on ICT in education

  - UNESCO-Intel ICT in Education Policy Platform (https://ictedupolicy.org)

UNESCO's Mobile Learning Programme
3. Teaching and Learning

- Using ICT to empower teachers and improve quality of learning

  - Through ICT Competency Framework for Teachers (ICT-CFT), guide countries to develop standards to support the effective pedagogical use of ICT
  - Build institutional capacity of pre-service teacher institutions in preparing teachers' ICT competencies

UNESCO's Mobile Learning Programme
4. Empowering Women and Girls

- Education empowers women and girls. It provides them the knowledge and ability needed to have control their own lives

- UNESCO's mobile learning programme looks at how mobile technology— from basic handsets to the newest tablet computers—can help promote gender equality, in education and beyond

Some examples from implementation

- Learning for Farmers' Activities - India 2009 – ongoing
- Literacy in Oral-Language Communities - Morocco (2012-2014)
- Mobile Literacy Project - Afghanistan (2011-2012)
- Pink Phone Revolution - Cambodia (2010-2012)
- Mobile-based Literacy Programme - Pakistan (2009-2012)
- Basic Mobile Literacy - Niger (2009-2011)
- The Jokko Initiative - Senegal (2009-2010)
- The Dab IYO DAHAB Initiative - Somalia (2008-2011)
- Mobile Learning Games - India (2004-2012)

Source: Mobile Phones & Literacy: Empowerment in Women's Hands (UNESCO 2015)

Learning for Farmers' Activities
India 2009 - ongoing

- **Target:** 320 women farmers (illiterate and semi-literate) in 25 rural villages of Southern India

- **Purpose:** To empower women in non-formal and informal learning settings with low-cost technologies offering the means to accelerate this process in the context of cognitive social capital

- **Process:** Women with interest in goat-rearing was trained to use mobile phones and receive daily SMS on topics including buying goats, feed management, disease management and marketing

- **Outcomes:**

- 82% of the women interviewed stated that mobile phone-based training is more useful and easier than face-to-face training

- Women's voice and participation in their communities and households was enhanced as part of collective agency

- Empowerment results from women's participation in learning and in owning assets: women were granted credit for start-ups in goat-rearing; formal training and the resultant self-directed learning enabled them to run viable enterprises and repay credit

Literacy in Oral-Language Communities
Morocco 2012-2014

- **Target:** Non-literate and semi-literate women (18-80) of a oral-based rural community (speaking Berber dialect)

- **Purpose:** To increase women's use of mobile phones and to make them active participants of a technology-based water management system that distributes fog-water

- **Process:** Women were taught to use text-based features of mobile phones to communicate and participate in the water management system. A water problem reporting syntax was created based on water problem concepts, visual icons and Arabic and Latin scripts

- **Outcomes:**

- Progress in narrowing personal mobile utility gap: women who had some SMS skills improved their ability to send texts

- a handful of entirely analphabetic women developed the ability to write their names

- Women were enabled to participate in the water management structure that was traditionally male dominated

Mobile Literacy Project
Afghanistan 2011-2012

- **Target:** 50 illiterate and neo-illiterate women in 2 rural villages in Herat Province

- **Purpose:** To promote basic literacy among women in rural areas

- **Process:** A mobile phone-based literacy component was integrated into a non-formal 9-month literacy program

- **Outcomes:**

- Rapid progress in transitioning from a literacy course level in only four months instead of nine

- 83% beneficiaries were able to complete the post-test using correct sentences structure and vocabulary

- a small number of students gained ability to read magazines and newspapers

5 May 2016

Pink Phone Revolution
Cambodia 2010-2012

- **Target:** 45 female commune counsellors and 7 women producers in 3 provinces

- **Purpose:** To improve communication among female commune counsellors; to enable women to receive information on agriculture, market prices and disaster-preparedness; to share knowledge and to report emergencies and domestic violence

- **Process:** Women were trained to use mobile phone with SMS system to access information such as weather forecasts, market prices, farming tips and health advisories

- **Outcomes:**

- Women used mobile phones in their daily lives to make calls to other council and community members, and to receive current market prices of agricultural goods

- Women overcame practical communication limitations caused by geographical distance

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Mobile-based Literacy Programme
Pakistan 2009-2012

- **Target:** Illiterate rural women (15-30) in 4 districts of Punjab Province

- **Purpose:** To help retain literacy and numeracy skills of new literate women in order for them to enjoy an improved status and livelihood

- **Process:** Daily messages were sent to women and adolescent girls on topics relevant to their lives, including maternal health, economic empowerment, sanitation and water

- **Outcomes:** After the 4-month training, participants showed:
- improvement in literacy skills
- enthusiasm for using mobile phones to learn literacy skills
- basic numeracy skills to solve basic math problems/money problems and to read written documents in Urdu
- improved writing of object names

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Basic Mobile Literacy
Niger 2009-2011

- **Target:** Adults in 117 rural villages in 4 districts in Niger
- **Purpose:** To give participants the opportunity to practice via mobile phones basic literacy skills acquired in a non-formal adult literacy and numeracy programme
- **Process:** A mobile phone texting module was incorporated into a non-formal adult literacy and numeracy programme

- **Outcomes:** Test scores in villages that incorporated the mobile literacy component were:
- 13% higher for writing
- 8% higher for math than in villages that received traditional literacy classes with no mobile phone intervention
- relatively equal effects on men and women, young and old

The Jokko Initiative
Senegal 2009-2010

- **Target:** Adult (49% women) and adolescent participants (59% girls) in 200 villages in rural district of South-East Senegal
- **Purpose:** Harness the potential of mobile phones as pedagogical tools to teach and reinforce literacy and as social mobilisation tools to build consensus on local development initiatives
- **Process:** A non-formal literacy component of a community empowerment programme, supported by a mobile phone-based literacy intervention in the local language in which learners use SMS to practice literacy skills

- **Outcomes:**
- participants able to read text messages increased from 8.5% to 63%
- participants able to use mobile phones rose by 40%
- participants able to read received text messages rose by 60%
- messages sent and received rose by 400%
- participants, especially women, expressed improved literacy and a sense of empowerment

The Dab IYO DAHAB Initiative
Somalia 2008-2011

- **Target:** Youth (247 female; 313 male) in Puntland, South Central Somalia and Somaliland

- **Purpose:** To build basic financial literacy skills and to ues basic mobile phone technology as a tool to empower Somali youth, particularly women

- **Process:** A mobile phone-based component with emphasis financial literacy skills, integrated into a community empowerment programme on livelihood skills of youth

- **Outcomes:** Statistically-significant improvement in on finance literacy:

- most youth were able to correctly identify liability vs. asset

- calculate personal net worth

- define 'debt' and 'asset'

- identify a long-term financial goal

- knowledge improvement in 'saving money', 'establishing and reaching financial goals', 'budgeting' and 'managing one's finances'

Mobile Learning Games
India 2004-2012

- **Target:** Children in low-income slums in 3 states of India
- **Purpose:** To improve English Second Language acquisition for children
- **Process:** Using mobile-based game application to teach children to recall English words by focusing on literacy sub-skills including phonological and orthographic awareness; oral vocabulary knowledge, phonetic decoding, etc.

- **Outcomes:** Post-test gains on measurements of 3 literacy sub-skills:
- *Pilot A/non-formal after-school rural intervention*: Statistically significant post-test gains on spelling skills
- *Pilot B/formal school urban slums*: Significant post-test improvements on measurements of orthographic awareness and oral vocabulary knowledge
- *Pilot C/informal learning*: Each week the average child learned an average of 3 new vocabulary words, based on games tracking the extent of their usage of at least 2 hours 23 minutes per week

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Key UNESCO resources

UNESCO ICT in education: http://www.unesco.org/new/en/unesco/themes/icts/

UNESCO Mobile Learning Week:
http://www.unesco.org/new/en/unesco/themes/icts/m4ed/mobile-learning-week-2015/workshops-2015/

International Conference on ICT and Post-2015 Education
http://www.unesco.org/new/en/unesco/themes/icts/policy/international-conference-on-ict-and-post-2015-education/

Qingdao Declaration
http://unesdoc.unesco.org/images/0023/002333/233352E.pdf

UNESCO Guide on measuring ICT in education
http://www.unesco.org/new/en/unesco/themes/icts/policy/indicators/

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Mobile Learning Week

Thank you