ICT in Education, Rwanda

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Rwanda: Reality & Challenges

Primary: Grade 1-6
2.15 Million Children in 2370 schools
31,037 teachers

Secondary: Grade 7-12
0.266 Million Children in 643 schools

Teacher student ratio of 1:74 in primary
Teacher student ratio of 1:22 in secondary

9.2 Million Population,
26,340 sq.km land area
12.4% land with forests

Literacy level is 64.9%,
GDP of USD 2.5 billion
Annual GDP growth of 5-6%

Net enrolment of 10% in secondary education and 1.7% in tertiary

- Shortage of qualified teachers
- Shortage of printed books
- Only 39% completes primary education

• 45.3% population is less than 15 years of age

Gender ratio is a concern at Tertiary level (girls to boys ratio of 0.4)
• The present ESSP is the forth update
• Emerging priorities of the nine year basic education policy is;
  integration of science and technology
• ESSP is focused to contribute the economic development and
  poverty reduction (EDPRS)
• It underpins the concepts of universal access and equity
• The ESSP is derived from the long term strategy and financial
  framework (LTSFF)
• We will continue to work with our partners to ensure we provide
  Science and technology in education is emerging as a key priority area
ICT as a tool for Teaching – Leaning in achieving the ESSP...
Efforts initiated by MoE ...

- National Information & Communication Infrastructure Plan 2006-10
- Infrastructure (10 PCs /school) deployed in 400 secondary schools
- Connectivity is being established – 83 schools connected so far
- 3000 teachers training in partnership with Microsoft
- GIS pilot initiative started in 10 schools in partnership with ESRI
- NePAD e-Schools initiative in 6 schools
- OLPC pilot in one primary school

- EMIS packaged in being developed

The Educational Management Development is another key priority area
Going forward ...
Addressing the critical factors...

- Teacher involvement
- ICT in Education as an integral part of teachers’ pedagogy and classroom process
- Dedicated Government / partner resources
- Prescribed infrastructure, hardware and power availability
- Process guidance, ongoing support and teacher development
- Digital learning material (relevance, quality & quantity)
- Monitoring and Evaluation
How OLPC can assist in achieving the ESSP and Critical Success factors?
Positives of OLPC

• The idea and ambition is very appreciable
• Packaged with all possible features – Specific to hardware
• The video and photo clarity is good
• Compact, good looking and less weight
• Attractive capital cost (If it is sold at USD 100/- Per Laptop)
• Meets most of the Environmental & Regulatory requirements
• Focused to support education
• Dual operating system compatibility – News from BBC News

Dual operating system at an additional cost of US$ 10/- per OLPC
Discussion points...

- Rwanda is looking for XO laptops for both children and Teacher
- Is the same configuration is good enough for the teacher?
- Do we need to install server in the school / classrooms?
- Battery back up – Enhancing the duration of back up
- Addressing the breakage/hardware failure/software problems
- Service back up at the filed level including components and AMC
- The framework for ICT integration and classroom management
- OLPC hangs if the children open couple of applications together
- Reliability of open source OS and support services
- Training and capacity building – teachers & administrators
- Curricular and Co-Curricular content in Regional Languages
  Almost 50% of the “OLPC” is not functioning in the pilot school
- Upgrading / replacement and electronic waste disposal
Some other challenges...

- Power availability
- Computer uptime
- Infrastructure cost
- Languages and trained teachers
- Monitoring

The Physical Geography for access and service is another challenge
Let us leverage the potential of ICT to enhance the quality of learning in Rwanda – of course with your support.

Thank you.