Sri Lanka’s Journey in ICT in Education

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Some facts

• Sri Lanka provides Free Education to all students all the way up to the University.
• It has **9790 schools and approx. 4 million student population**.
• It has approx. **200,000 teachers in the School Education System**.
• About 350 schools (referred to as national schools) are operated under Central Government and the remaining schools are under provincial ministries of education.
• Administration done through 95 education zonal offices.
• Very low number of private schools. But this is growing.
• **Almost 100% enrollment in primary schools (one of the MDGs) and above 90% literacy rate.**
ICT Infrastructure

- Over the last decade, government of Sri Lanka has set up approx. 2000 fully fledged computer laboratories and another 2500 basic computing facilities in schools – *A total of 4500 schools.*
- The above has provided the basic ICT exposure to students of all grade in the above schools.
- The student distribution in schools is very much skewed. When schools are ranked by student population the following is seen.

<table>
<thead>
<tr>
<th>% of Schools</th>
<th>% of Total Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% of Schools</td>
<td>47% of Student Population</td>
</tr>
<tr>
<td>20%</td>
<td>66%</td>
</tr>
<tr>
<td>30%</td>
<td>80%</td>
</tr>
<tr>
<td>50%</td>
<td>90%</td>
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</tbody>
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ICT Infrastructure & Teacher Training

- Through the provision of ICT facilities to 50% of the schools, government has effectively covered 90% of the students.
- Parallelly, there has been another initiative – teacher training.
- Nearly 100,000 teachers have been provided with basic ICT training and introduction to computer aided learning (CAL).
- Due to primarily logistical reasons, these trainings have been one off exercises with no support mechanism to follow up on how these teachers are applying what they have learnt, reducing the overall effectiveness of the training.
- A more sustained approach to teacher training with a proper monitoring mechanism is required.
Teacher Training

- **Intel Teach program** has succeeded in filling this gap.
- It has used a pedagogical approach that encourages teachers to make use of ICT in their teaching/learning process.
- It has provided much needed support and follow up mechanism to track how teachers make use of ICT.
- Launched in 2006, it has trained over 22,500 (10%) teachers in eight provinces out of nine
- Trained over 2,500 Directors and Principals
- Introduced to all pre-service National Colleges of Education
- Over 1,500 Schools (15%) covered and nearly 1 million (25%) students touched

http://iteach.schoolnet.lk
Changes in Curriculum

• Education curriculum in Sri Lanka has been slowly changing from “Teacher Centered Learning” to “Student Centered Learning”.

• However, the real rate of change has been low due to number of reasons:
  – Lack of resources for students to gather the required knowledge
  – Logistics issues in providing teachers with necessary training and support mechanism
  – *Schools with ICT laboratories are isolated from each other making sharing of best practices harder.*

**ICT provides a way out through network connectivity**
SchoolNet (www.schoolnet.lk)

• In 2006, Ministry of Education has established a Wide Area Computer Network connecting schools and other education related offices with a centralized Network Operation Center.

• It has the following objectives:
  – Provision of safe Internet Access to schools
  – A platform for sharing teaching/learning resources
  – A mechanism for centralized monitoring of ICT infrastructure at School Level
  – Provision of Hosting facilities for School Web Sites, Email
  – Provision of access to Learning Management Systems
  – Web 2.0 support

• “Leap of Faith” Project. No pilot. Stage 1 consists of provision of connectivity to 1200 schools and education offices.
SchoolNet

Who are in SchoolNet?
- Schools (Approx. 1500 schools)
- Computer Resource Centers
- Provincial ICT Centers
- National Colleges of Education
- Zonal Education Offices
- Provincial Education Offices
- Ministry of Education (MoE)
- National Institute of Education (NIE)

The target is to provide connectivity to 4500 schools by end of 2013 to reach a coverage of 90% of student population.
SchoolNet

- Today, SchoolNet has evolved into a unique platform to provide an ideal teaching/learning environment for ICT in Education.
- It is the Largest Computer Network in Sri Lanka
- Approx. 1750 connected places
  - 1203 nodes (under Stage 1)
  - Approx. 550 (under Stage 2 – currently in progress)
- A virtual **private** network connecting schools and other education related organizations.
- Nation-wide infrastructure to bring schools together **online**.
- A platform for **Next Generation Teaching/Learning**
- After 5 years in operation, an Evidence Based Study and Nation wide Survey is currently being done to measure the impact of SchoolNet - [surveys.schoolnet.lk](http://surveys.schoolnet.lk)
ICT based Learning Resources

• SchoolNet has accelerated the need for ICT based Teaching/Learning Resources.

• Number of initiatives in this direction:
  – Public-private partnerships in developing ICT based teaching/learning resources. Materials developed are expected to be both self-learning materials for students as well as a teaching aid.
  – **Intel Skooool Project** – Hosted at SchoolNet
  – Encouraging teachers and students to develop ICT based teaching/learning materials through nationwide competitions.
**In Sri Lanka:**

- Launched in 2007
- Localized to Sinhala & Tamil languages by University of Moratuwa
- Over 100,000 hits per month
- School teachers encouraged to use during regular teaching
- UoM Expertise extended to skool Health Care
Towards ICT in Class Room

- Even though a centralized ICT labs (one or two) in a school provides accessibility ICT resources, it is not the best way for ICT in Education.
- ICT need to be present within the class room.
- This is a huge challenge for a developing country like Sri Lanka in terms of Capital funds.
- The government has recognized the need and has few initiatives in this direction.
Donation of Classmate PCs

500 Classmate PCs donated to schools and 100 more in the pipeline

1. Encourages ICT in the classroom.
2. Enabled rural schools to get connected to the Internet
3. Motivated students to attend school
4. Collaborating with other countries and benefitting through voluntary work, donations, etc.
Conclusion

• Sri Lanka is making a determined effort towards ICT in Education.

• Number of challenges still exist
  – ICT Integration into curriculum still at almost zero level
  – Cyclic huge investment required to maintain ICT infrastructure at school level.
  – Lack of motivation for teachers to adopt ICT based teaching/learning