

The experience of governance of ICT in Education in Mauritius: a Small Island Developing State (SIDS) perspective

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Mauritius at a glance

- **Independence from UK : 1968**
- **Region of the world : Africa**
- **Sub Region : Mascarene Indian Ocean islands**
- **Country Size : 60km x 40 km**
- **Population : 1.3 M, multilingual, multi-ethnic**
- **Diversified Economy : Tourism, Financial Services sector, Sugar, Textile ,ICT, Logistics hub, Ocean Resources, Regional medical hub**
- **Education infrastructure : 260 Primary schools, 150 Secondary Schools, 4 Public Universities**
- **Gender parity in Education**
- **Near 100% GER in Primary and Secondary Education**
- **Narrow land natural resource base, large oceanic base**
- **GDP per capita : US\$ 9600 (2016), 3rd in Africa**
- **Mo Ibrahim Governance Index : 1st in Africa**



The local context and constraints of ICT in Education in Mauritius

- **Small-size of available local human resource** - limited expertise in ICT
- **Small scale ICT consumption** – relative high cost of ICT
- **Relative low cable connectivity due to geographical isolation- relative high cost and low speed** of internet connections
- **Limited local private sector experience** – little local expertise *specifically* for ICT in Education sector
- **Small industrial base** – Relatively small opportunities in ensuring placements and training opportunities in ICT sector for students
- **Brain drain of high achievement individuals** especially in ICT-related sectors
- **Fast obsolescence** of ICT equipment leads to cost issues in expansion and replacement of ICT throughout the Education system
- **Vulnerability to external economic factors** impacting on ICT industry

Implications for policy development and management of ICT in Education in Small States

- A **cautious approach** in managing ICT in Education given limited local resources
- Investment in our **only natural resource** : training students and adults in using ICT – National ICT programmes
- Plan the deployment of **ICT infrastructure** in all schools
- Development of **OER-based** digital educational content with a forthcoming National OER Policy
- Bring **digital education to all students**, at all levels, including TVET and students with Special Educational Needs
- Better **manage education with ICT tools**, eg. through a developed customised online EMIS that will include information on ICT infrastructure and usage
- ICT programmes have to be **relevant** to industry needs, through **professionalisation of Secondary Education in ICT**, and also with **Polytechnic diplomas in ICT**



Steering ICT in Education for efficiency and sustainability in low resource country

- The Setting up of a **dedicated E-Education directorate** at Ministry to advise policy, and to manage and plan the ICT in Education system
- Develop a **Strategic Plan document in ICT in Education** – Development of an ICT Strategy with support of World Bank – to improve planning within the overall national Education reform agenda
- Set up an **HR ecosystem that supports ICT in Education**: Chief Information Officers in other Ministries, ICT focal persons at all layers of educational management, ICT Support officers within schools
- Secure the **system's support and technical maintenance in schools**
- Designate dedicated agencies with specific focus on ICT in Education with:
 - *A training culture across the system*
 - *Coherent digital resource production*
 - *Synergy and dialogue with industry and other Ministries*

Aligning ICT in Education with local and regional contexts

- **Policies and practice in ICT in Education must be aligned with local contexts of Small Islands Developing States**
- **Use OERs, but also complement with local digital resources** that need to be in context
- **Promote Distance Education** as a capacity-building tool for Small States
- Develop **partnerships with ICT industry**, but **avoid vendor lock-in** situations
- Make **digital resources visible in a multi-ethnic context** and **for islands that may be remote from one another**- Digital resources are prepared by the MGI for all languages that are taught in Mauritius
- Ensure **evaluation and monitoring through research** of the how educational quality if improved when using ICT in Education
- **Share and encourage international networking** in ICT in education in similar contexts, because the local exchanges are limited –
 - Sharing in sub-regional region of the Indian Ocean : **Indian Ocean Commission, Indian Ocean Rim Association, Southern African Development Community (SADC)**
 - Pan African collaboration : **CESA-ICT, GESCI**
 - Global networking and collaboration : **UNESCO, IITE, Commonwealth of Learning**

Fighting digital isolation

- We want our Human Resource to be **well prepared for the world of today and tomorrow**
- Build a **structured and synergized system of managing ICT in Education**
- Train teachers both on a pre service and in-service basis , and **both in technical competency in ICT, but also in using ICT for improved pedagogy**
- **Train educational managers** in ICT in Education– inspectors and heads of schools – **if they are not convinced, their teachers won't be either**
- Deploy **technologies that are adapted to each level**
- **Introduce Coding early in schools** to ensure availability of software developers and reduce dependency on external developers
- Build resources that are adapted to the curriculum through a **national repository of open resources accessible from several devices** (Web, Apps in tablets, digital set top boxes, TV learning channel)

ICT in overcoming isolation of SIDS

“SIDS can envisage rapid technological innovation, especially in information and communications technologies, that will help to overcome island isolation, create new ways of maintaining social and cultural ties across the island diaspora and help evolve new economic activities.”

UNEP 2014 - GEO Small Island Developing States Outlook.

THANK YOU !

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