

The Use of ICTs & Innovative approaches to Enhance Education




PRESENTATION BY :
Jennifer Britton
Deputy Programme Manager
ICT4D
CARICOM Secretariat

Virtual Educa
SURINAME
Feb 29 – March 1, 2012



CARICOM at a Glance

- Countries: 15 + 5 associates
- Population: 15 million +
- Workforce: relatively young
- Languages: English, French, Dutch



CARICOM: four (4) pillars of regional integration

- *Foreign policy coordination*
- *Economic integration*
- *Functional cooperation*
- *Security*



Flagship Programme - CSME

The main objectives of the CARICOM Single Market & Economy are:

- full use of labour (full employment) and
- full exploitation of the other factors of production (natural resources and capital);
- competitive production leading to greater variety and quantity of products and services to trade with other countries.
- ~ for improved standards of living and work and sustained economic development



Drivers

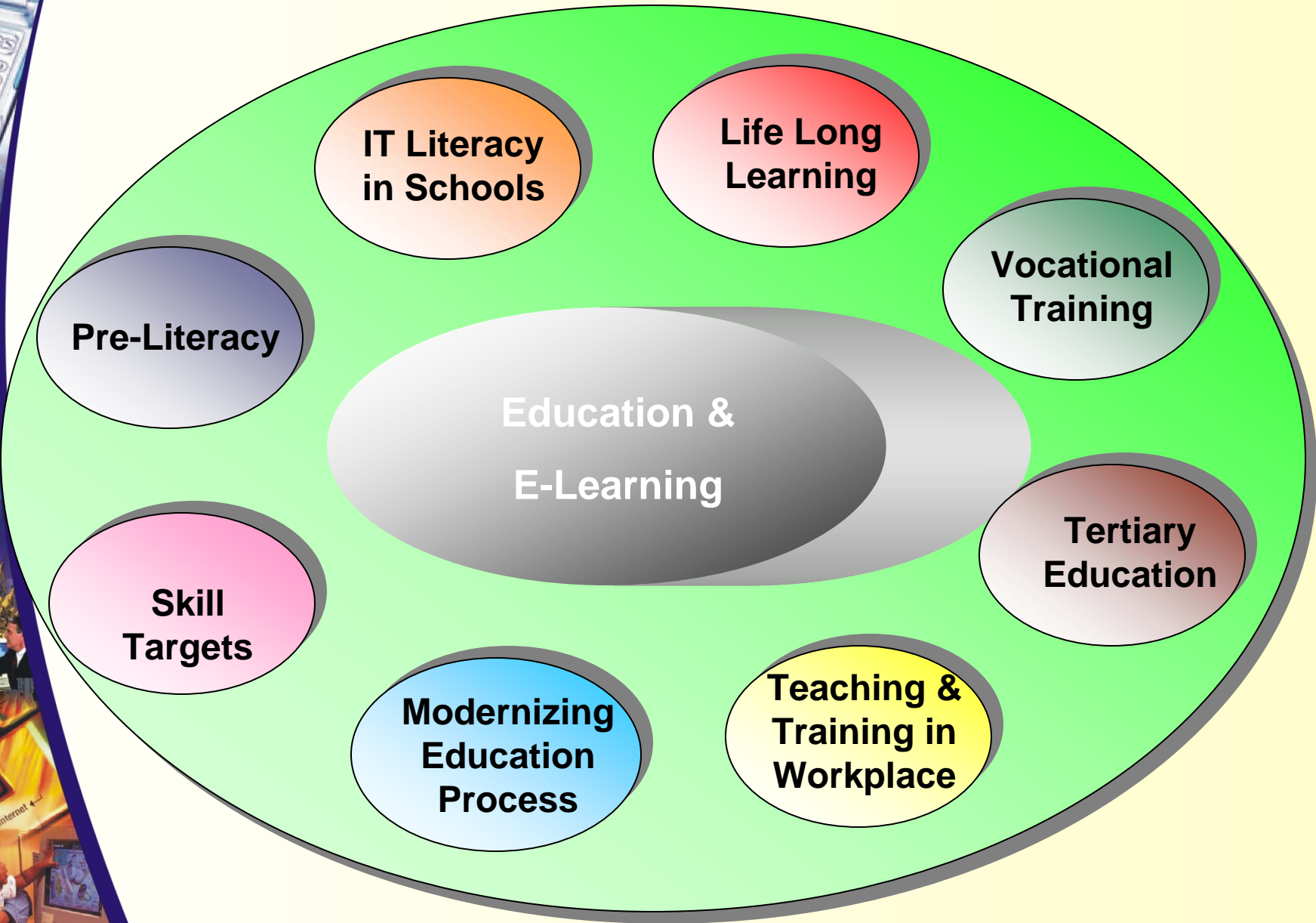
- **Trading Agreements**
- **International Goals / Imperatives/ Plans**
 - **MDG**
 - **WSIS**
- **Relinquish dependency on International development partner support**
- The dynamics of knowledge-based economy and society
- Multiple impacts of globalization
- Evolutionary/revolutionary aspects of ICTs

Overview

- Challenges
- Findings
- Other Supporting Strategies
- ICT4D Strategy and Education
- Snapshot of what's on the Ground
- Opportunities for Partnership

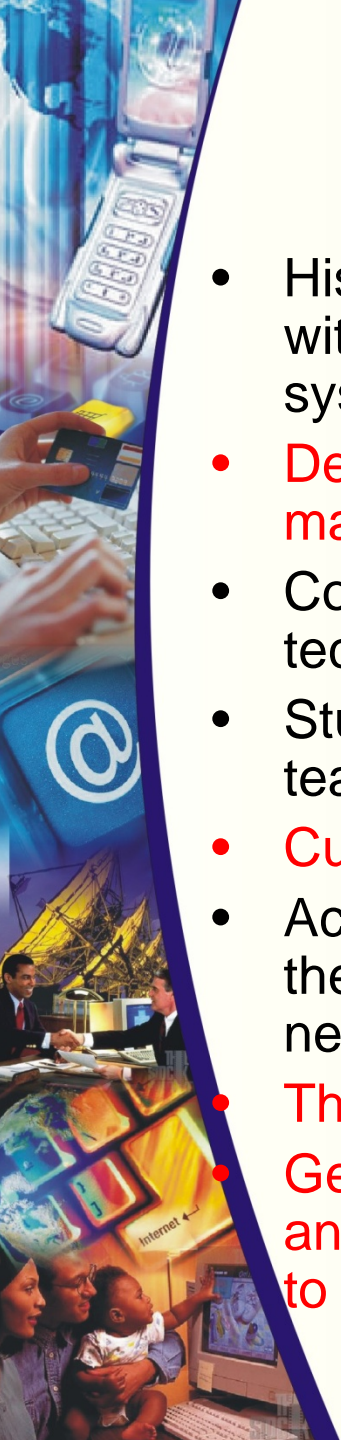


Education Plans / Frameworks



Challenges

- Historically, most nations have charged Ministries of Education with task of determining broad design of country's educational system.
- **Development and implementation of government policy can't match ever-accelerating speed of technological innovation.**
- Coordinating strategy while dealing with new /emerging technologies
- Students may have access to more information sources than teachers , more familiar with computers than textbooks
- **Cultural issues, Fear**
- Access to and the use of ICTs in the teaching process is not at the desired level needed to make the transformational changes necessary
- **The absence of verifiable indicators of success, and**
- **General disconnect between a country's development policy and its ICT and Education strategies, have also made it difficult to properly measure gains at a national /regional level(s).**





Education & New Economy:

- requires higher levels of education including high-tech skills,
- demands opportunities for lifelong learning so that workers can keep pace with the high speed of developments in technology, globalization, and new business practices.
- ~For a more educated workforce is critical not only to raising per-capita incomes but also to reducing income inequality.



Summary of Findings:

- *A level of technophobia and resistance to change;*
- *Teachers operating at the emerging and applying stages of ICT use, versus the infusing and transforming stages;*
- *Difficulty by teachers to plan effectively for ICT use;*
- *The need for effective professional development.*

More findings...


- Issues related to out-of-school children, illiterate youths and adults
- Inequity of educational opportunities(quality, gender, location, socio-economic background)
- Capacity to define and monitor the quality of learning
- Continue to use historical modes of delivery (other channels = ad hoc)
- Resources not matched to demand for education
- Decreasing number of students in critical areas (physics, math , engineering)
- Agree that all drivers of economic growth can benefit from the development of human capacity in general and from ICT skills





Strategies / Policies

- Services
- Industrial
- Agriculture
- Youth Development Goals
- Energy
- Cultural / Creative Industries



ICT4D Strategy

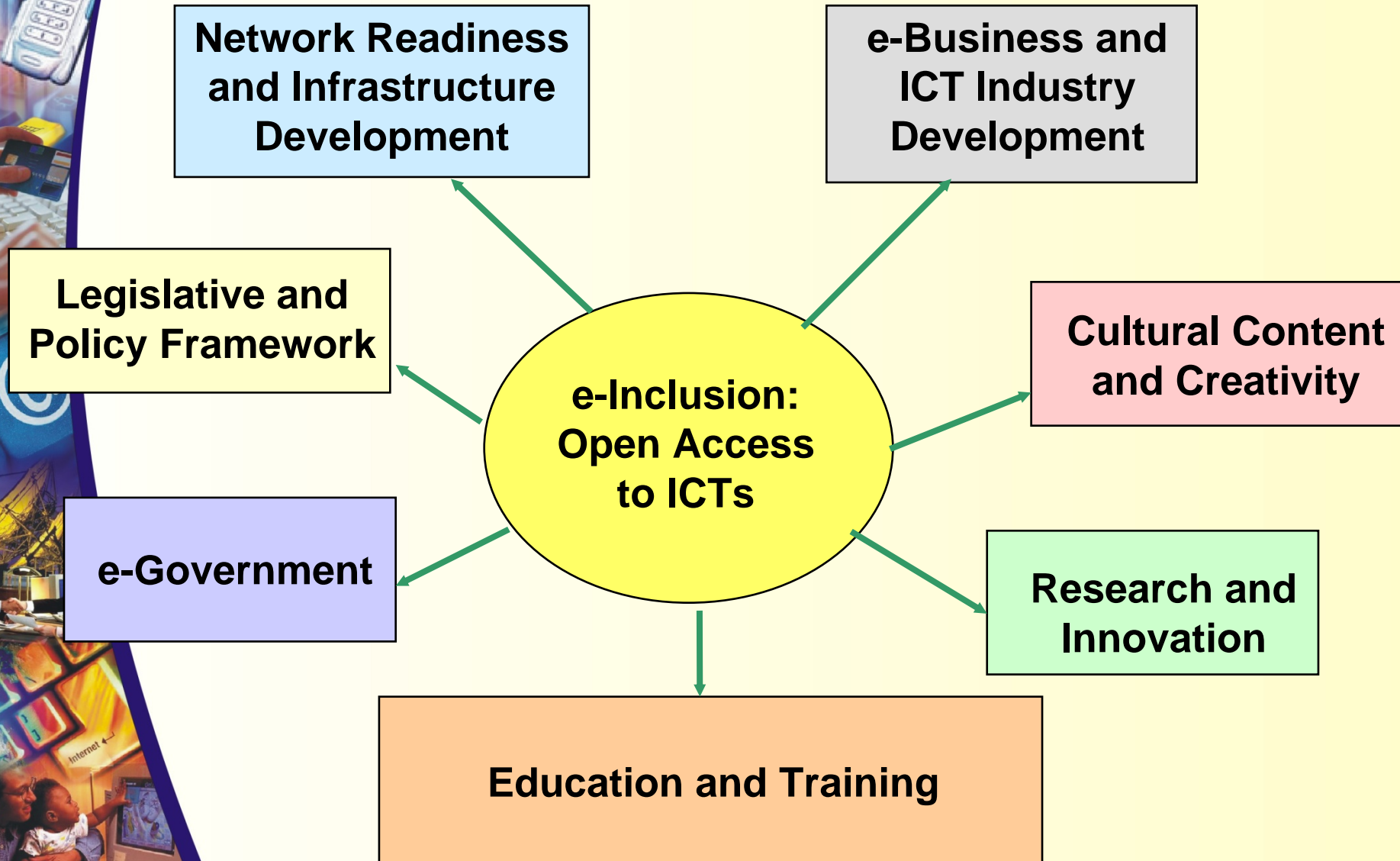
- Regional Digital Development Strategy
 - Mandated by the CARICOM Heads of Government in 2009
 - Approved 2011



Context of the RDDS: New Economy:

- ***Information Society/Knowledge Economy***
 - ***Inclusive and Collective***
 - ***Collaborative digital environment***
 - ***People empowered by the availability of information***
 - ***People generate knowledge through interaction.***

The Strategic Plan Addresses





Education Context (RDDS)

- Centred on Developing **Knowledge Workers & Digital Citizens**
- ICT offered as
 - a solution to the education dilemma
 - as a catalyst for innovation and research and support for lifelong learning for all.
- **Scope**
 - E – Learning / E-Education
 - E- Inclusion
 - E- skills
- Implications for: Labour, Health, Business



Education Context from the RDDS

- Enhancing quality of learning & teaching
- Skill Formation
- Life long Learning
- Improving project planning and management
- Community Linkages
- Supporting Education “Anytime, Anywhere”

– ,



Consultations & Findings (RDDS)

- National Consultations (every Member State except Haiti)
 - Recognise the importance of infusion of ICT in development sectors,
 - Importance of engaging all partners – most importantly private sector
 - 10 ‘Cs’ – Connectivity, Content, Community, Commerce, Capacity, Capital, Curricula, Creative, Co-ordination Mechanisms, Culture

Linking Education & Production

PHASE 1

Technology literacy –
(Curriculum based)

Develop skills in using ICT

PHASE 2

Knowledge deepening –
(Competency based)

Use ICTs in problem solving

PHASE 3

Knowledge creation – digital literacy
(Competency based and personalised)

Use ICTs in critical thinking and in providing creative solutions

12 Global Competitiveness Indicators

Basic requirements

- Institutions
- Infrastructure
- Macroeconomic stability
- Health and primary education



Key for
factor-driven
economies

Most
Member
States

Efficiency enhancers

- Higher education and training
- Goods market efficiency
- Labor market efficiency
- Financial market sophistication
- Technological readiness
- Market size



Key for
efficiency-driven
economies

Few
Member
States

Innovation and sophistication factors

- Business sophistication
- Innovation



Key for
innovation-driven
economies

None




Education Priorities

Improving Quality of Education.

Increasing Access to Tertiary Education through greater private investments. *Expanding the pool of knowledge workers with general problem-solving skills*

Producing Skills Demanded by Employers.



Measurement (for Evaluation)

- ❑ How can education and literacy best contribute to effective use of ICT, and correspondingly, how can effective use of ICT contribute to education and literacy
- ❑ How is the internet affecting literacy and what new literacy (e.g. information literacy, computer literacy) are required for using the internet
- ❑ Literacy: this affects online access at both the macro- and micro levels.
 - ❑ Macro level: mass literacy and education as enablers of economic development
 - ❑ Micro level: reading, writing, and thinking skills remain crucial for being able to use the internet.



Development of Indicators

Literacy :

- Computer literacy (basic)
- Information literacy
- Multi-media literacy
- Computer-mediated communication literacy



Development of Indicators (3 of 3)

Literacy and Education

Education: Computer education: educational programs to empower socially marginalized people to learn how to use computers

Computer-enhanced education: broader curriculum in public schools/colleges based on courses and content in areas such as mathematics, science, social studies, language and arts

Distance education: learning through internet-based distance communication



NATIONAL DIGITAL STRATEGIES...

STATE	ICT POLICY/ STRATEGY	KEY THEMES	SECTOR FOCUS
<i>Dominican Republic</i>	Strategy for Knowledge	Sustainable growth, equality. Social inclusion	Access; digital government, public services; policy
<i>Grenada</i>	Strategy and Action Plan	Gov't, business, education, society	Gov., legal infrastr.; human resource
<i>Guyana</i>	Developin g strategy	Public sector reform, HR, economic dev.	Education, content, public sector

NATIONAL DIGITAL STRATEGIES

STATE	ICT POLICY/ STRATEGY	KEY THEMES	SECTOR FOCUS
<i>Antigua & Barbuda</i>	Policy – People First	Affordable access; modern telecom'	Marketing, gaming, software, education
<i>Bahamas</i>	E-commerce; 2003 Digital Agenda	Sustainable growth and development	E-bus., e-gov., telecom; human resource; finance; content; tourism
<i>Barbados</i>	National ICT Strategy,	Health, wealth, security	Human resources; quality of life;
<i>Belize</i>	E-readiness	E-transactions	Laws, HR, Government
<i>Dominica</i>	E-government	Services; reduce poverty; improve competitiveness	Government, tourism, education, agriculture, ICT

NATIONAL DIGITAL STRATEGIES...

STATE/ AGENCY	ICT POLICY/ STRATEGY	KEY THEMES	SECTOR FOCUS
<i>St. Lucia</i>	E-dev/ Edu. Strategy	E-government Education	Tourism, agriculture, training, health,
<i>St Kitts and Nevis</i>	Strategy - to be revised	Infrastructure for Information society	Tourism, financial services, education, agriculture
<i>St. Vincent and the Grenadines</i>	Strategy and road map	Public sector reform, HR, Infrastructure	Education, content, culture
<i>Belize</i>	In process	Government, education	Education
<i>Trinidad and Tobago</i>	Policy and strategy	HR, economy, e- government	Education, SME, health care, justice




National Programmes for Transformation

- **Jamaica's eLearning Initiative**
- **Barbados EduTech 2000 initiative**
- **A & B – Mobile IT Classrooms**
- **(Most) One laptop per child / family / Teacher Training**
- **(Few) Public/private programmes**

Regional

- **CUPIDE**
- **CKLN**
- **C@RIBnet**
- **UWIDEC**
- **UWI – Open Campus**
- **Compete Caribbean**





Regional Agencies

Partnership for ICT CAPABILITY

(HUMAN INFRASTRUCTURE)

- Partners identified: **CKLNA; CXC; CRITI; CAIC and Regional Coalitions; CARICAD; Regional Media, CARINFO**



Opportunities to Collaborate

- Development of an ICT4E Framework
- Strong Caribbean presence in International Meetings
- Regional Hub for capacity building in open source software for education and research
- IT teacher training framework
- Lifelong learning for socio-economic development.
- Networking academies

Related:

- Establishing a digital local language library
- Digital connected regional information/documentation centres
- Regional search engine
- Developing robust IT infrastructure
- Development of CARICOM Statistics & Indicators

Thank you!



Contact info: jbritton@caricom.org

ict4dstaff@caricom.org

Website: www.caricom.org

www.carib-is.net

www.caricomict4d.org