TL Module I: Understanding ICT in Education

Unit 2: National ICT Policy and its Impact on Education

Objectives:   
Pre service teachers should be able to identify key characteristics of classroom practices and specify how these characteristics serve to implement policies. (UNESCO ICT-CFT, TL.1.a)

****Duration:   
Total of 3 notional hours – 1 hour computer practical session, 1 hour self-study preferably at a computer, 1 hour group tutorial.

# A] Computer Practical (Total 1 hour)

**Notes to Facilitator**

Students will need to be provided with an opportunity to work in a computer laboratory setting in order to develop their Internet searching skills. The facilitator should guide the students through the steps to open the web browser, access the specified document and save it. The facilitator should be on hand to support the students as required but should also encourage the students to interact with their peers when help is required. Ensure that the workstations have Adobe Acrobat Reader loaded (visit <http://getadobe.com/reader/> as the student will need this browser plugin to access policy documents).

**Task 1: Downloading Documents/Resources**

In Unit 1 you had the opportunity to navigate the World Wide Web. In this unit we will use this skill to locate a specific website and download an education and technology policy document. That document will act as the focus of this unit’s activities.

**Step 1:** Open your Internet browser (e.g. Internet Explorer or Mozilla Firefox) either by clicking on the icon on your desktop or by selecting the ‘Start’ button, then ‘All Programs’ and then the name of your browser.

**Step 2:** Now look for the address field in the browser. Browsers programs normally locate this field at the top of the screen (see Figure 1 below for an example). In the address field, type in the following URL: <http://www.ict4d.gov.gy>.



**Figure 1: URL Field in Internet Explorer**

**Step 3:** Press enter on the keyboard or select the GO button with the mouse pointer. The browser will access the site directly. You will notice that this is much faster than using a search engine.

*Note: What does this URL tell you about the website? It is a government website (.gov) from the country Guyana (.gy)!*

**Step 4:** Scroll down to the bottom of the screen and click on the ICT4Guyana National Strategy Document.

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| **Step 5:** Save the file by selecting the save button at the top left hand side of the screen. |  |

You will notice that a ‘pop-up window’ will appear. Click on the ‘SAVE’ button and take note of where the file has been saved onto your computer.

Saving downloads – that is, documents and files saved from the WWW – is not difficult but it does takes a bit of organisation to be able to find it later on your computer. Having a specific folder for the document you have downloaded will make it easier to find, back up or install at a later time.

[Read more at <http://www.basiccomputerinformation.ca/saving-dowloads/> [CC BY-NC-ND].]

**Task 2: Download a Copy of the ‘*Education Strategic Plan’***

**Step 1:** Visit the Guyana Ministry of Education website [see <http://www.education.gov.gy>].

**Step 2:** Navigate to the ‘*Resource Library*’ section of the website.

**Step 3:** Scroll down the page and click on the ‘*Policy*’ link.

**Step 4:** Click on ‘*Education Strategic Plan’*.

**Step 5:** Download a copy of ‘*Education Strategic Plan*’ and save it.

# B] Self-Study (Total 1 hour)

The following self-study activity will provide you with an opportunity to develop an understanding of the relationship between classroom practices and the way in which they contribute to the implementation of national polices. You will spend time reading through and familiarising yourself with the ICT4Guyana National Strategy Document. It should be noted that you will require a copy of the ICT4D Guyana National Strategy Document.

It is important to understand the relationship between classroom practices and the way in which they serve to contribute to the implementation of national polices. This is often overlooked, as the passage below suggests.

‘There are often huge gaps between policies and the changes in classroom practice that they are intended to affect (Cohen & Hill, 2001). Policies are articulated, but teachers are often not aware of the specifics of these policies or their goals. In turn, policies are implemented as programs, but often these programs are not effective in achieving change at the classroom level. A study by Cohen and Hill (2001) found that policies were most effectively implemented in classrooms where teachers had extended opportunities to learn policy-related materials. Rather than general reviews of policy statements or discussions of their implications, the most effective teacher-development experiences were concrete, content-specific, and instructionally useable practices directly connected to policy. Consequently, ICT policy implementation can best be assured when teacher professional development includes specific skills and tasks that incorporate ICT into their everyday classroom practices and explicitly connect these practices to ICT and broader education policies.’[[1]](#footnote-1)

Extracted from: Kozma, R. (in press). *Comparative analysis of policies for ICT in education*. In J. Voogt and G. Knezek (Eds.) International handbook of information technology in primary and secondary education. Springer: New York.

Even though the passage states that ‘*general reviews of policy statements or discussions of their implications’* does not provide the most effective teacher development experience, it is in fact the starting point. Only once you have a clear understanding of the policy and the objectives/statements that apply to your particular educational setting, you can begin to construct and implement learning practices that support the objectives/statements.

[Read more at <http://www.csdms.in/gesci/Kozma_Policy_Recommendations_for_India.asp>] [CC BY-NC-ND].]

**Task 1:** **Review ICT4Guyana National Strategy Document**

Spend some time reading through and familiarising yourself with the *ICT4Guyana National Strategy* document. Focus specific attention to the following chapters of the document:

* Chapter 6: Defining the Future [see p17]
* Chapter 7: Specific Strategic Objectives and Actions [see p19-41]

# C] Tutorial (1 hour)

**Notes to Tutor**

Students should be divided into groups consisting of no more than 10 members. Each group will require a copy of the *ICT4Guyana National Strategy* document as well a mechanism for capturing notes and ideas (computer or pen and paper). One member of the team should be appointed as the scribe and should take responsibility for documenting the outcome of the discussion (i.e. the group’s response to the queries listed below.)

**Task 2: Example Answers**

The following objectives could be listed:

* To promote the development of ICT services and businesses to increase job opportunities and generally to improve the economic and social well-being of the Guyanese;
* To improve the competitiveness of existing industries and to facilitate the sustainable development of new enterprises, thereby supporting economic diversification;
* To increase Guyana’s international competitiveness in the delivery of goods and services to the global marketplace;
* To support national programmes and initiatives that foster social cohesion;
* To create a new generation of citizens that can use ICTs to leapfrog Guyana’s development;
* To develop and implement the necessary policies, laws and regulations that support the sustainable development of the ICT sector.

**Task 3: Example Answers**

See some examples of classroom practices that could support the specific ICT objectives listed in the ICT4Guyana National Strategy document

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| **Specific Objective** | **Example Classroom Practice/Activity** |
| * To promote the development of ICT services and businesses to increase job opportunities and generally to improve the economic and social well-being of the Guyanese. | Typing, formatting and printing Curriculum Vitaes (CVs). Being able to develop a professional CV could help the learners not only to secure jobs after school but also provide them will skills that are required by numerous other individuals who might be willing to pay for such a service. |
| * To create a new generation of citizens that can use ICTs to leapfrog Guyana’s development. | Set assignments where the computer skills developed can be implemented within local contexts. For example, helping parents research prices of local produce, etc. |
| * To improve the competitiveness of existing industries and to facilitate the sustainable development of new enterprises, thereby supporting economic diversification. | Link the teaching of ICTs to business studies or entrepreneurship. Students use ICTs to research, cost, market and track expenditure and profit, etc. |

Working in tutorial groups (8-10 members), read through the ICT vision, overall objective and specific objectives of the *ICT4Guyana National Strategy* document [see page 17].

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| 6.1 The National ICT vision:  *‘*All citizens, businesses and public institutions in Guyana will have the opportunity to participate in the information and knowledge society in order to accelerate national development and prosperity*’.*   * 1. The Overall Objective of the Strategy is to accelerate economic growth and social development.   The specific objectives of the strategy include:   * To promote the development of ICT services and businesses to increase job opportunities and generally to improve the economic and social well-being of Guyanese. * To improve the delivery of, and access by, all citizens to government and other public services, including information on government activities and opportunities, public health, education and social development services. * To improve the competitiveness of existing industries and to facilitate the sustainable development of new enterprises, thereby supporting economic diversification. * To increase Guyana’s international competitiveness in the delivery of goods and services to the global marketplace. * To develop pertinent, strategic and focused network infrastructure to enable access to information and knowledge. * To support national programmes and initiatives which foster social cohesion. * To ensure access to reliable ICTs at the lowest sustainable prices so that all Guyanese have the opportunity of participating in the information and knowledge society. * To create a new generation of citizens that can use ICTs to leapfrog Guyana’s development. * To development and implement the necessary policies, laws and regulations that support the sustainable development of the ICT sector. * To modernise Guyana’s public administration, industry, commerce and communication sector. * To support initiatives to encourage innovation and creation in the ICT sector.[[2]](#footnote-2) |

**Task 2:** **ICT4Guyana National Strategy within the Classroom Setting**

List the specific ICT objectives of the *ICT4Guyana National Strategy* that should be addressed within the classroom setting.

**Task 3:** **Classroom Practices that Support the Specific ICT Objectives of the *ICT4Guyana National Strategy***

Brainstorm three classroom practices that would support the specific ICT objectives as listed in the *ICT4Guyana National Strategy* Document.

# Resources Used in this Lesson Unit

ICT Guyana. (2006). *ICT4D Guyana National Strategy*. Retrieved from <http://www.ict4d.gov.gy/ictstrategy/ICT4D_Strategy_FinalDraft.pdf>.

Newbie.org. (n.d.). *Learn to use Internet Explorer*. Retrieved from <http://www.newbie.org/internet_explorer>.

Basic Computer Information. (2011). *Saving downloads*. Retrieved from <http://www.basiccomputerinformation.ca/saving-dowloads/>.

Ministry of Human Resource Development Government of India. (2008). *National Policy on ICT in School Education*. Retrieved from <http://www.csdms.in/gesci/Kozma_Policy_Recommendations_for_India.asp>.

1. Ministry of Human Resource Development Government of India. (2008). *National Policy on ICT in School Education*. Retrieved from <http://www.csdms.in/gesci/Kozma_Policy_Recommendations_for_India.asp>. [↑](#footnote-ref-1)
2. ICT Guyana. (2006). *ICT4D Guyana National Strategy*. Retrieved from <http://www.ict4d.gov.gy/ictstrategy/ICT4D_Strategy_FinalDraft.pdf>. [↑](#footnote-ref-2)