

## KD Module 1: Understanding ICT in Education

### Unit 2: Modification of Lesson Plans to Support Policy



#### Objectives:

Pre-service teachers explain and analyse the principles of using ICT in education. Describe how these principles can be put into practice in their own teaching. Analyse what issues arise in implementing these principles and how the issues can be addressed (KD.1.a).

Pre-service teachers operate various open-ended software packages appropriate to their subject matter area, such as visualisation, data analysis, role-play simulations, and online references (KD.4.a).



#### Duration:

Total of 6 notional hours – 2 hour tutorial, 2 hour computer practical and 1.5 hour self-study activity (preferably at a computer) and a second 30-minute tutorial.



#### A] Computer Practical (2 hours)

#### Notes to Facilitator

During the Technology Literacy course, students were introduced to the Internet and WWW and were given an opportunity to develop basic searching skills and later, more complex Boolean searching skills. In this unit students will apply the skills and knowledge developed in order to search for educational websites and summarise the services available. Students should be divided into groups consisting of no more than 10 members. Each group will require access to a computer with Internet connectivity in order to access educational websites. Once the activities have been completed, you should coordinate a report-back session and facilitate discussion among the various groups.

#### Exploring Educational Resources Online<sup>1</sup> [CC: BY-ND]

As you find your way around the Internet and the WWW you will soon realise that there are many educational websites offering different products and services. As a teacher it may be in your interest to organise the sites you will be visiting according to what they can offer. There are many websites that offer lesson plans for specific learning areas. For examples, see below:

#### Mathematics

- Maths Forum - <http://mathforum.org/>
- Mathsnet - <http://www.mathsnet.net>

<sup>1</sup> SchoolNet SA, South African Department of Education, & South African Institute for Distance Education. (2010). *Commonwealth Educators' Network*. Retrieved from <http://www.schoolnet.org.za>.

*Science*

- School Science - <http://www.schoolscience.co.uk>
- Discovery Education - <http://school.discoveryeducation.com>

*Other*

- BBC Education - <http://bbc.co.uk/education>
- SAILOn (Subject Area Interactive Lessons Online) - <http://www.pasadenaisd.org/sailon/>

**Task 1: Summarise Resources Available on Websites**

- Working in groups (2 x 4-5 members), select at least two educational websites (either through searching or from the list provided).
- Visit each website and use the table below to summarise the details of the resources that can be found on the site.

Name of website:	
Learning/subject area(s):	
Features and offering	Yes/No
<i>Free educator support materials</i>	
1. Lesson plans	
2. Homework for learners	
3. Collaborative activities for educators	
4. Curriculum frameworks	
5. Computer-based worksheets	
6. Printer-friendly resources for classroom use	
<i>Software</i>	
7. Freeware – totally free software	
8. Shareware – free commercial software samples for trialling	
9. ICT-based learning and teaching aids for buying	
10. Simulation software (role-playing real situations, allowing students to interact )	
11. Drill and practice software (repetitive sums or problems to solve)	
<i>Information and communication</i>	
12. General information on mathematics education	

13. Chat room	
14. Any other educator interaction space online	

**Task 2: Review Resources Available on Websites**

- Each group should swap summaries created with two other groups.
- Visit each of the websites and review in conjunction with the summary created.

**Task 3: Finding Appropriate Resources on Websites**

- Record the thoughts and opinions of your group about finding appropriate resources on websites. Do you think this process could be helpful in your teaching practice? How?
- Nominate a presenter who will take responsibility for presenting the ideas of the group to the class.

**B] Tutorial (Total 2 hours)****Notes to Tutor**

During the Technology Literacy course, students were introduced to word processing and afforded an opportunity to spend time working through the online activities in order to develop their skills and confidence. In this unit, students build on the knowledge already developed by considering innovative ways in which a word processor can be used as a resource by learners during the learning process. Students will be expected to review an example activity and draft a list of issues that should be considered when implementing a classroom activity in which the word processor is used as a resource by learners during the learning process. Students will need access to a computer with Internet connectivity as they will be expected to spend time online searching for innovative lesson plans and/or classroom activities. The facilitator will need to be on hand to support students who encounter problems completing the activities. Students should be encouraged to try and solve problems by working with their peers.

**Using a Word Processor as a Learning Resource<sup>2</sup> [CC: BY-ND]**

It is important to think about innovative ways in which the word processor can be used as a resource by learners during the learning process. Learners enjoy working with computers, and often tackle quite routine tasks with more enthusiasm if the task is performed using a word processor. Computer literacy is not just about learning what you can do on the word processor. Computer literacy is most effective when the computer is used as a resource for learning.

**Task 1: Creative Writing Activity (1 hour)**

- Study the creative writing activity below. This is an example of a way in which the word processor can be used as a resource by learners during the learning process.

<sup>2</sup> SchoolNet SA, South African Department of Education, & South African Institute for Distance Education. (2010). *Commonwealth Educators' Network*. Retrieved from <http://www.schoolnet.org.za>.

### Creative Writing (Example Activity)

#### Preparation:

Find one or more interesting pictures that will encourage debate or creative writing. The picture will be the subject of writing for the lesson. Each small group in the class will write a passage based on the picture.

#### Lesson:

Divide the class into small groups around each word processor. Each group should discuss the picture, and then start writing. The first person in the group starts writing the opening sentence of a passage. Then, the second person writes the second sentence, the third person writes the third sentence, and so on. All members of the group should watch the screen as the activity proceeds. This is usually a fun activity that leads to a lot of laughter as learners try to follow each other's thinking, and the story can take many unexpected twists and turns. Encourage them to have fun and be creative. This could continue until five minutes before the lesson time has expired. Afterwards, the passages could be printed and pasted on the wall or sent by e-mail to you, the educator.

- Consider the successes and potential problems of this activity.
- Write down your thoughts regarding the successes and problems of the activity.
- Draft a list of the issues that should be considered when implementing a classroom activity in which the word processor is used as a resource by learners during the learning process.
- Save a copy of the list (either on the computer hard drive or on a removable storage device).

### Task 2: Search for Lesson Plans and/or Classroom Activities (1 hour)

- Search the WWW for innovative lesson plans and/or classroom activities in which the word processor can be used as a resource by learners during the learning process.
- Refer to the list of issues that should be considered when implementing a classroom activity in which the word processor is used as a resource by learners during the learning process.
- Summarise the details of the resources that can be found on the websites visited.

Tip: Save the resources found (either on the computer hard drive or on a removable storage device).



### C] Self Study (Total 90 minutes)

#### Notes to Students

During the Technology Literacy course you were requested to download a curriculum guide from the Guyana Ministry of Education website and develop a lesson plan that illustrated the way in which an ICT tool or resource could add value to a curriculum activity. The following self-study activity will give you an opportunity to use and demonstrate your knowledge of lesson plan development. You will be required to develop an appropriate lesson plan by modifying resources found in the previous activity to address the learning outcomes of the 'Intermediate Word Processing' section of the *Information Technology Curriculum Guide (Grade 8)*. Once you have created the lesson plan you will need access to a printer with paper in order to print a copy.

#### Task 1: Lesson Plan

- Select one of the innovative lesson plans and/or classroom activities found on the www to create a learning activity in which the word processor is used as a resource by learners during the learning process.

- Modify/adapt the activity, as required, to ensure that it aligns with the learning outcomes of the 'Intermediate Word Processing' section of the *Information Technology Curriculum Guide (Grade 8)* [CC: BY-ND].

[See Learning Objectives below or 'Information Technology Curriculum Guide' – Page 14.]

### **Learning Objectives**

**Skills:** Use advanced formatting features:

- Lists
- Fonts
- Tables
- Borders
- Shading

**Knowledge:**

- Text to be formatted within a given document must first be selected (highlighted).
- Bullets are used to stress important points.
- Numbering is used for itemising.
- Tables can be inserted to organise information and data on a page.
- Borders and shading can be used to enhance or highlight a particular word, thought or idea.

**Understanding:** The type and audience of the document must be taken into consideration when choosing various formatting features.

**Attitude:** Willingness to exert time and effort to use all available formatting features to improve the look, readability and appeal of a document.

- Develop a lesson plan using MS Word.

<b>Lesson Plan</b>	
Level (Primary/Secondary):	
Grade:	
Subject:	
Topic:	
Objective:	
- Skills:	
- Knowledge:	
- Attitude:	
Content:	
Description of Activities (Methods/Strategies/Materials):	
Evaluation:	
Areas of Integration:	

- Print out a copy of the lesson plan.



## D] Tutorial (30 minutes)

### Notes to Tutor

You should coordinate a report-back session and facilitate discussion among the various groups. The class should be divided into pairs (two students per group). Each student will be required to review and present a brief summary of the lesson plan to the class, highlighting successes and problems of the activity.



### Resources Used in this Lesson Unit

SchoolNet SA, South African Department of Education, & South African Institute for Distance Education. (2010). *Commonwealth Educators' Network*. Retrieved from <http://www.schoolnet.org.za>.

Guyana Ministry of Education. (2011). *Level 8 – Information Technology Curriculum Guide*. Retrieved from <http://www.education.gov.gy>.