ICT In Education Educators’ Course

Paper I: Technology Literacy Cycle Examination

Time: 90 minutes

Marks: 100

* Read the questions carefully
* Ensure that your script has your name clearly printed at the top. If you have a student number insert this data too.
* Number your answers exactly as the questions are numbered on this question sheet.
* Work in an orderly way and present your answer as neatly as possible.
* You are strongly encouraged to type your answers on a computer using a word processor but should you be concerned that this will take too long then a hand written submission is acceptable.
* Accurate and adequate factual knowledge is essential but equally important is the ability to use the correct technical terms appropriately.

**General Section**

1. The components of a URL tell us a little about the web site itself. For example the last two letters of this address, http://www.teachertalk.org.za, tell us that the website:
   * belongs to a commercial enterprise
   * is South African
   * belongs to an organisation
   * is on the World Wide Web

(2)

1. What is the purpose of the ‘Home’ button on a typical Internet browser?
   * To take the user back to a page viewed previously;
   * To stop the loading of a page no longer desired;
   * To navigate back to the first page viewed in a session;
   * To navigate forward to the next page to be viewed in a session.

(2)

1. Boolean logic when used to conduct advanced Internet searches uses the following operators:
   * + - 1. AND, OR, NEAR and NOT;
         2. THE, AND, NEAR and IS;
         3. AND, NOR and NOT, NEAR;
         4. THE, AND, NEAR and A.

(2)

1. When creating a mark book in MS Excel the formula to work out the total of a column of figures is :
2. =TOTAL(B1:B14)
3. =AVG(B1:B14)
4. =SUM(B1:B14)
5. +TOTAL(B1:B14)
6. +MEAN(B1:B14)

(2)

1. Didactic Teaching can be summarized as:
2. Instructional
3. Informative
4. Teacher centred
5. Students observe and copy
6. All of the above
7. None of the above

(2)

1. The videos on Khan Academy are examples of which philosophy in action:
2. Didactic Teaching;
3. Constructivist Learning;
4. Constructionism;
5. Behaviorism
6. Post Modernism Learning

(2)

1. Which of the following software programs would appeal to learners’ whose learning preference is to use their ‘Spatial intelligence’?
2. Excel
3. PowerPoint
4. FireFox
5. Acrobat
6. Moodle
7. Angry Birds

(2)

1. What is a computer pod?
2. A computer lab of between 20-30 computers;
3. An MP3 player;
4. A cluster of 3-5 computers;
5. The teacher’s computer and printer.
6. A mini hub of about 10 computers

(2)

1. What should students be warned when working online?
2. Sharing passwords;
3. Giving out personal information to people they do not know;
4. Accessing inappropriate material;
5. All of the above.
6. b & c above
7. a & b above

(2)

1. Which one of the themes below is NOT a theme of Digital Citizenship:
2. Digital Access: full electronic participation in society;
3. Digital Etiquette: standards of conduct and procedure ;
4. Digital Security: electronic precautions;
5. Digital Network: allowing broad connections to society.
6. Digital Health & Wellness: Physical and psychological wellbeing

(2)

Section Sub Total: (10x2=20)

**Section 1: Understanding ICT in Education**

1. Below are a number of objectives as described in various national policy documents. Complete the grid by inserting in the second column some concrete examples of how classroom activity might bring about the specific objective :

|  |  |
| --- | --- |
| **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. |  |
| To create a new generation of citizens that can use ICTs to leapfrog Guyana’s development. |  |
| To improve the competitiveness of existing industries and to facilitate the sustainable development of new enterprises, thereby supporting economic diversification. |  |

(10)

Section Sub Total: (10)

**Section 2: Curriculum and Assessment**

1. Effectively using a search engine is considered an important competency (TL.4.f.). Explain what functionality now exists within these search tools, beyond word or phrase searching that has an educational application. Identify the feature and then show how it can be used for educational purposes.

(7)

1. As schools have started acquiring computers so electronic School Administration packages have become popular. Explain what the advantages are of using such a package over traditional ways of record keep.

(7)

1. There are many online assessment tools today, such as Quizstar, discuss how they might be used in one of your lessons and why how these tools offer additional functionality over and above traditional assessment methods.

(7)

Section Sub Total: (21)

**Section 3: Pedagogy**

1. In a typical didactic lesson there are ideally 6 phases. Order these phases in the correct order.
   * Lesson Objectives
   * Teacher Input
   * Review
   * The’Hook’
   * Learning Check
   * Student Activities

(6)

1. Complete the table below and identify how the following technology tools might support a didactic style lesson:

|  |  |
| --- | --- |
| **Technology Tool** | **Didactic Style Deployment/Activity** |
| Data Projector/ SmartBoard |  |
| Word Processor (MS Word, Open Office Writer) |  |
| Video Editor  (Movie Maker) |  |

(6)

1. What are the features of Audacity and Gimp software that could be harnessed easily to support didactic style teaching?

(2x2=4)

Section Sub Total: (16)

**Section 4: Organization and Administration**

1. There are both pros and cons in setting up a *computer lab* in your school. Use the table below to identify both the strengths and weaknesses of the practice.

|  |  |
| --- | --- |
| **Strengths** | **Weaknesses** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

(10)

1. Success when positioning ICT in the *classroom* is dependent on good preparation. The following areas are important. In the second column describe the type of things that need to be considered under each heading:

|  |  |
| --- | --- |
| **Element** | **Description** |
| Time Management |  |
| Planning |  |
| Integration |  |

(6)  
Section Sub Total: (16)

**Section 5: Teacher Professional Learning**

1. Complete the table below that illustrates how ICT can add value to a teacher’s productivity.

|  |  |  |
| --- | --- | --- |
| **Activity** | **The Traditional Approach** | **The ICT Approach** |
| Planning | Printed forms or specially designed books provide templates that teachers can fill out for planning their lessons. |  |
| Assessing | Paper-based assessments are taken by students in the classroom and teachers physically mark these. |  |
| Keeping Records | Files and specially designed books are used to keep a record of documents, such as lesson plans, marks and syllabi. |  |
| Coordinating and Communicating | Exchanging notes and using paper diaries are common ways in which teachers coordinate meetings and other events. Several teachers also rely on notice boards or word of mouth to pass on information. |  |
| Collaborating | Teachers physically meet to discuss and brainstorm their ideas. |  |

(9)

1. What is a digital dossier and why should students be aware of their own dossier?

(6)

Section Sub Total: (16)

**Examination Total: (100)**