

DIGITAL LITERACY

Teacher's Guide: GRADE 9 - Lesson 2

Preventing health hazards when using ICT Equipment

CORE COMPETENCY: Use the computer system to perform various tasks

ELEMENT: Understand the health risks of prolonged ICT use, their preventive measures and uphold ethical standards in data privacy and security

PERFORMANCE CRITERIA:

- Recognise physical and visual strains caused by prolonged computer use
- Apply ergonomic principles in ICT usage
- Follow safety precautions to minimise risk

PURPOSE OF ACTIVITY:

To help learners understand the health risks associated with the use of ICT equipment and to promote safe and ergonomic practices

LEARNING OUTCOMES:

By the end of this lesson, students should be able to:

- Identify different types of health hazards (e.g., eyestrain, posture problems, and repetitive strain injury)
- Demonstrate correct ergonomic sitting posture and screen setup
- List preventive measures to avoid ICT-related health issues


RESOURCES AND MATERIALS:

- Computer
- Projector or interactive screen (Interactive Flat Panel Display) - OPTIONAL
- Infographics or posters showing ergonomic setups
- Worksheet with matching questions
- Adjustable chair and table for demonstration

IMPLEMENTATION GUIDELINES:

1. Begin with a discussion on students' daily ICT use habits.
2. Present visual materials on common ICT-related health hazards.

Video to demonstrate an ergonomic desk setup to avoid back and neck pain



**THE 15 POINT
OFFICE
ERGONOMICS
CHECKLIST**

<https://www.youtube.com/watch?v=riD8Xt8r1MQ>

Scan me!

3. Demonstrate correct posture and ergonomic arrangements.
4. Allow learners to adjust a workstation correctly.
5. Facilitate peer feedback on workstation setups.

ASSESSMENT:

1. Matching questions on identifying health hazards.
2. Labelling a diagram of an ergonomic workstation.
3. Checklist for personal ICT usage habits.

EXTENSION OF ACTIVITY:

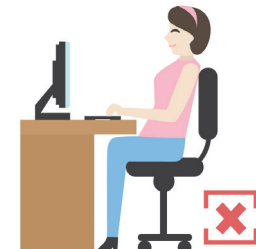
- Ask students to audit their home or school computer stations and suggest improvements.
- Create posters promoting ICT health safety practices for display in classrooms.

PREVENTING HEALTH HAZARDS WHEN USING ICT EQUIPMENT

HEALTH HAZARDS



EYE STRAIN



POOR POSTURE



REPETITIVE
STRAIN INJURY

ERGONOMIC TIPS



- SCREEN AT EYE LEVEL
- SIT UP STRAIGHT
- KEEP WRISTS FLAT
- KEEP FEET FLAT

PREVENTIVE MEASURES



TAKE REGULAR BREAKS



EXERCISE AND STRETCH



ENSURE PROPER
LIGHTING

- Activity 1: Match each **health hazard** to its possible **cause** by writing down the corresponding alphabet in the answer grid below. An example has been provided in the answer grid.
- Activity 2: Complete using the following words (provided in Student's Worksheets).
- Activity 3: Checklist for personal ICT usage habits.
Sit at a computer desk and check your posture against the guidelines
(provided in Student's Worksheets)