



Health and Safety Issues in ICT

2008
17 minutes

Program Synopsis

This program looks at health and safety issues surrounding ICT in relation to the ever increasing use of computers at home, school and the workplace. It provides the means to increase awareness of how health and safety can be compromised by the way we use ICT and what we can do to ensure a healthier computing environment.

For more information please visit www.classroomvideo.com.au or contact customer service at customerservice@classroomvideo.com.au or on 1800 644 254

Teacher Notes:

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Introduction

We use ICT every day for homework, work, playing games, browsing the internet, instant messaging, downloading music, etc, but it's easy to do without thinking about the dangers that can exist to our health due to our posture, tripping dangers or even how close we are to the monitor. This can lead to problems with back pain, eye strain, pain in the hands and arms, as well as posing more serious dangers to ourselves and those around us because of poorly arranged cables and clutter.

By understanding these issues we can take action to improve the way we use ICT and therefore have a healthier and safer ICT environment.

Program Rationale

Health and Safety in ICT is aimed at all year levels and all users of ICT. It provides the means for gaining an understanding that, while ICT is firmly entrenched in our society for work, study and entertainment, there are certain things we need to know about and the possible dangers to our health that ICT can pose and what we should do to prevent this. The program achieves this by illustrating the relationship between people and computers in all environments. It also illustrates that a balanced approach to computer use is also a healthy approach.

Program Timeline

00:00:00	Introduction
00:01:00	Computers and People
00:04:06	Occupational Overuse
00:07:42	Ergonomics and Computers
00:10:51	Monitoring the Workplace
00:16:38	Conclusion
00:17:26	Credits

Useful Resources

Internet Resources:

- <http://www.flinders.edu.au/ohsw/Ergobook/EB-Index.html>
- <http://www.ehs.uts.edu.au/hazardguidelines/workstationsetup.html>
- http://www.pb.unimelb.edu.au/ehs/workplace_ehs/office_ergonomics/comp_mouse_keyboard_index.php3

Program Worksheet

Before the Program

1. As a group activity, discuss the various aspects of our lives that involve directly using ICT including all types of peripheral equipment and the ways we use them. Then discuss issues such as overuse, posture and equipment location. Discuss the various types of negative impact these may have on our health and safety.

During the Program

1. What fraction of Australia's population has a computer at home?

2. Which age group uses the internet the most?

3. What type of issues can arise from computer overuse?

4. What are some of the signs that a problem with computer overuse exists?

5. Complete this statement:

"If you lock yourself away with your computer, your _____"

6. Does a laptop computer put more strain on your muscles than a desktop computer?

7. Where should you use a laptop computer? Why?

8. Describe the right posture to have at a desk when using a laptop computer.

9. Having the correct posture will reduce which risk?

10. What other problems can occur along with OOS and why?

11. How can this be prevented?

12. What other types of breaks should we have and how?

13. How often should we have breaks?

14. What is ergonomics?

15. List some of the equipment available to improve ergonomics while using computers.

16. What is the most important technique we can use to improve our health and safety when using computers?

17. What's the role of an OH&S Officer in an ICT environment?

18. Insert the missing words.

The two types of audits OH&S Officers are responsible for are _____ audits,
which identify hazards in a room such as cables on the floor and poor _____, and
_____ audits which identify hazards around desks such as incorrectly
_____ and _____.

After the Program

Group or individual activity:

1. Ask the group to perform the exercise of identifying potential health and safety issues.
2. Ask the group to suggest possible resolutions to these issues.
3. If in a computer lab, suggest that the group adjust the workstation they are sitting at appropriately for their use.
4. Identify and illustrate the difference between individual students' methods to highlight that we all have different needs and therefore must address the setup accordingly.

Suggested Student Responses

During the Program

1. What fraction of Australia's population has a computer at home?
About 3/4
2. Which age group uses the internet the most?
Between 15 and 17-year-olds
3. What types of issues can arise from computer overuse?
Obesity, illness, sleep and memory problems; can be considered an addiction
4. What are some of the signs that a problem with computer overuse exists?
Spending long hours on the computer, anxiety when away from the computer, skipping meals and not going to the toilet
5. Complete this statement:
*"If you lock yourself away with your computer, your **relationships in the real world will suffer.**"*
6. Does a laptop computer put more strain on your muscles than a desktop computer?
Yes
7. Where should you use a laptop computer? Why?
At a desk. If not at a desk, it will make your neck hunch up in unnatural positions and make your hands and wrists ache.
8. Describe the right posture to have at a desk when using a laptop computer
Chair height so that arms are level with the keyboard and elbows make a 90-degree angle. Sit up and back in the chair, feet flat on the floor or on a footrest and eyes level with the top of the monitor.
9. Having the correct posture will reduce the risk of what?
Occupational Overuse Syndrome (OOS)
10. What other problems can occur along with OOS and why?
Problems can occur when your muscles tense for long periods of time.
11. How can this be prevented?
By sitting properly and having frequent breaks.
12. What other types of breaks should we have and how?
Eye breaks: look at something about six metres away and hold for 20 seconds.

13. How often should we have breaks?

About every 30 minutes

14. What is ergonomics?

The science/study of the design of tools and environments used to improve the performance and well-being of workers.

15. List some of the equipment available to improve ergonomics while using computers.

Ergonomic chairs, adjustable monitors, adjustable desks, ergonomic mice, ergonomic keyboards

16. What's the most important technique we can use to improve our health and safety when using computers?

Rest and time away from the computer

17. What is the role of an OH&S Officer in an ICT environment?

To identify a hazard in the workplace before it becomes an incident

18. Insert the missing words.

The two types of audits OH&S Officers are responsible for are **floor** audits which identify hazards in a room such as cables on the floor and poor **lighting**, and **desk** audits which identify hazards around desks such as incorrectly **adjusted chairs** and **monitors**.