



O-4 Look after your storage devices

Key messages

- A Portable Storage Device is a device for recording (storing) information (data).
- Because of their small size, Portable Storage Devices (PSDs) can be easily lost, misplaced or stolen.
- Personal information stored on these devices can be used to someone else's advantage eg theft of financial or personal information, use of personal identity or corruption of data (viruses).
- There are many ways to safely use PSDs.

Illustrating the topic

A. Hemi has spent many hours at school and home writing his story for a school competition. He has been saving his work on a USB or memory stick. It fell out of his pocket and now all his work is lost.

B. Bob is a doctor and has saved his patient files to his tablet. He took the train home but left the tablet on the seat where it was found. Now someone else can see all his patient information.

C. Danae lost her cell phone. She had not got around to putting a password on it. All her bank details and passwords were stored on it so she could find them easily. Now someone else is spending her money.

D. Evelyn started noticing her Facebook Page had comments that were not from her. She realised this started happening just after her laptop had been stolen.

E. Anaru has gone to his local public library to make use of the free wifi with his phone. He uses Bluetooth to buy a new bike tyre at an online shop. There is a hacker who intercepts Anaru's unencrypted data and now more items are being purchased but not by Anaru. (More on Encryption in L-6).

Discussion questions

Use the 'Illustrating the Topic' scenarios to discuss data storage issues and privacy breaches.

- What are some different types of PSDs?

- Why do people want to use PSDs?
- In what ways does information get separated from the owner?
- What PSDs do the class own or use?
- What stories do the students have about people losing data from PSDs?
- How can we protect PSDs?
- What are some other ways we can store information safely and conveniently?

Activities

- Class or groups identify the problems in each of the Illustrating the Topic scenarios. Record some of the vocabulary used.
- What is a Portable Storage Device (PSD)? Provide a range of images of various PSDs eg CD, DVD, Floppy Disk, Media Card, Mobile Phone, USB stick, Tablet, Laptop, Portable Music Devices (Ipod or MP3), Flash Drive. Discuss what is similar and different. Create a definition. Make a T Chart showing advantages and disadvantages of using a PSD.
- Using the same images, allocate each group an image to research. Use the links below and others to focus on 5Ws (refer to Resources) eg What is it?, When (was it used, created)?, Who would use it?, When does it risk people's privacy? etc. Make a poster or create an online presentation (refer to presentation tool suggestions in Resources).
- Groups swap posters. Students are now Privacy Advisers to another group's research. Create a plan to go with the poster outlining the ways to protect this PSD.

Resources

Definition and Risks of PSDs - <http://privacy.org.nz/news-and-publications/guidance-notes/guidance-note-on-the-use-of-portable-storage-devices/>

Blog about Risks of Identity theft - <http://www.idt911blog.com/2013/09/risk-of-identity-theft-rises-as-more-children-use-mobile-devices/>

Images - Just type 'Portable Device' to find many relevant images from – <http://www.everystockphoto.com/>, Google images, <http://www.flickrcc.bluemountains.net/>, <http://compfight.com/>

Presentation Tools – <http://prezi.com/>, Powerpoint, Google Presentations (free and also accesses copyright free images), For Ipads - www.educreations.com, Sock Puppets - <https://itunes.apple.com/nz/app/sock-puppets/id394504903?mt=8>, Wordle - www.wordle.net/, Tagxedo, www.tagxedo.com

Protecting Portable Devices: - <http://www.us-cert.gov/ncas/tips/ST04-017>,

Netsafe - <http://www.netsafe.org.nz/how-to-keep-your-mobile-devices-safe-and-secure/>

5Ws Chart -

http://www.learnquebec.ca/export/sites/learn/en/content/curriculum_elem/personal_development/erc/documents/erc_e1_5ws.pdf