

TOPIC 7

Information Access and Sharing

Finding, Evaluating, and Sharing Digital Information Safely

Senior Two | ICT
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What We Will Learn Today

- 1. Introduction to Information Access (Online vs Offline)
- 2. Offline Resources: Encyclopaedias and Digital Databases
- 3. Technologies for Sharing Information
- 4. Internet Safety and Responsible Use
- 5. Common Internet Risks and How to Stay Safe
- 6. The 10 Golden Rules for Safe Internet Use

Quick Check: What Do You Already Know?

Answer TRUE or FALSE for each statement:

- 1. The internet is the only way to access information. [T / F]
- 2. Bluetooth can be used to share files without the internet. [T / F]
- 3. Phishing is a type of fish found in Uganda. [T / F]
- 4. You can spread a virus using a USB flash drive. [T / F]
- 5. Microsoft Encarta is still updated regularly. [T / F]

(Answers will be revealed during the lesson!)

Introduction: The Information Age

We live in the Information Age — vast amounts of knowledge are available at our fingertips.

Knowing how to FIND, EVALUATE, and SHARE information effectively and safely is one of the most important skills you can develop today.

Information can be accessed:

ONLINE — Through the internet (Google, websites, online databases)

OFFLINE — Without internet (Encyclopaedias, CD-ROM, library databases, local networks)

 *Class Discussion: In your community, which is more common — online or offline access? Why?*

Why Information Access Matters

Look at these real-life examples from Uganda and beyond:

-  A student searches for information about climate change for a school project.
-  A farmer looks up agricultural advice online to improve crop yields.
-  A doctor accesses medical databases to research a patient's rare condition.
-  A job seeker finds employment opportunities through online platforms.
-  A journalist verifies facts from multiple sources before publishing an article.
-  A community member shares local news and information via social media.

 **THINK:** Which of these examples is most relevant to **YOUR** life right now?

Offline Information Resources

Before the internet, people relied ENTIRELY on offline resources. These are still valuable — especially where internet access is limited.

Resource	Description
Encyclopaedia Britannica	Comprehensive printed/digital reference covering all knowledge areas. One of the oldest and most trusted.
Microsoft Encarta	Multimedia encyclopaedia on CD-ROM/DVD. Had text, images, audio, video, maps. DISCONTINUED in 2009.
School/Library Databases	Offline digital databases of books, journals accessible via local network.
CD/DVD Resources	Educational software and reference materials on discs — useful without internet.
Offline Wikipedia (Kiwix)	Wikipedia downloaded for offline use via the Kiwix app. Ideal for areas with limited connectivity.

Digital Encyclopaedias: Where Are They Now?

Microsoft Encarta

- Discontinued in 2009, fully shut down by 2011
- No longer available for official download or purchase
- Originally on CD/DVD and subscription
- Current online downloads are unofficial and potentially UNSAFE
- Only accessible through old physical copies

Encyclopaedia Britannica

- Now primarily ONLINE-based
- Accessible at britannica.com (free & paid)
- No full offline version in modern use
- Older CD/DVD editions exist but are outdated
- Recommended as a reliable, citable source

 ***Recommended Approach: Use online encyclopaedias for current info. Combine with offline tools for flexibility.***

Activity 3.1 — Using an Encyclopaedia

Individual Research Task | Choose ONE topic:

- Option A: The history and impact of the Internet
- Option B: How computers work (hardware and software)
- Option C: The development of mobile phones over the decades
- Option D: Artificial intelligence — what it is and examples

What You Must Do:

1. Find your topic in the encyclopaedia. Read the main article carefully.
2. Write a ONE-PAGE summary in your OWN words (not copy-pasted!).
3. Note THREE facts you found most surprising or interesting.
4. Record the SOURCE (encyclopaedia name, article title, date accessed).
5. Share findings with a partner — compare what you both learned.

Technologies for Sharing Information

Once you have information, you need to be able to share it. Different technologies have different speeds, ranges, and uses.

Technology	How It Works & Key Features
Email (Gmail, Outlook)	Send messages/files via internet. Formal communication. Requires internet connection.
Computer Networks (LAN/WAN)	LAN = within one building. WAN = across large areas. Internet = world's largest WAN. Share via network folders.
Cloud Storage (Google Drive)	Store files online, access from any device. Ideal for collaboration and backup.
Bluetooth	Short-range wireless (≈10m). No internet needed. Share photos, music, contacts.
USB Flash Drive	Physical transfer via USB port. Fast and reliable. Risk: can spread viruses.
Social Media & Messaging	WhatsApp, Facebook, Telegram. Fast and popular. Warning: can spread misinformation.
Wi-Fi File Sharing	Share via same Wi-Fi network using SHAREit, AirDrop (Apple), Nearby Share (Android).

Comparing Information Sharing Technologies

Technology	Speed	Range	Needs Internet?	Best Used For
Email	Medium	Worldwide	YES	Formal messages, documents
Cloud Storage	Medium-Fast	Worldwide	YES	Collaboration, backup
Bluetooth	Slow-Medium	~10 metres	NO	Sharing nearby, quick transfers
USB Flash Drive	Fast	Physical only	NO	Large files, no internet areas
Wi-Fi File Sharing	Fast	Same Wi-Fi network	NO (local)	Fast local file transfers
Social Media	Fast	Worldwide	YES	Quick sharing, messaging

 **Exercise: Which technology would YOU choose to submit your homework to your teacher? Justify your answer.**

🔑 Exercise 3.1 — Sharing Information Practically

Complete the following tasks (as available in your school):

TASK 1 — EMAIL:

Open/create a Gmail account. Compose an email to your teacher sharing a summary of Activity 3.1. Attach a file. Use proper subject line, formal greeting, and sign-off.

TASK 2 — CLOUD STORAGE:

Open Google Drive. Upload your presentation. Right-click > Share > Get Link. Share with your teacher. BONUS: Share with a classmate as VIEW only.

TASK 3 — BLUETOOTH:

Turn on Bluetooth on two devices. Pair them and transfer a small image file. Record: How long? What was the file size?

REFLECTION: *Create a comparison table — Speed | Range | Needs Internet | Best Used For*

Internet Safety and Responsible Use

The internet is a powerful tool — but it comes with REAL RISKS.

Being a safe and responsible internet user is essential in today's world.
Everyone who uses the internet — young or old — must understand these risks.

Internet Safety Means:

- ✓ Protecting your personal data
- ✓ Avoiding harmful or inappropriate content
- ✓ Being aware of cyber threats (phishing, malware)
- ✓ Using strong passwords and safe browsing habits
- ✓ Respecting other users online (no cyberbullying)

Common Internet Risks — Part 1

Risk	What It Is	How to Stay Safe
Cyberbullying	Using technology to harass, threaten, or embarrass someone. Causes serious psychological harm.	Report immediately to a trusted adult. Block the bully. Screenshot evidence.
Phishing	Fake websites/emails that trick you into giving personal info (passwords, bank details).	Always check the URL and sender address. Never click suspicious links.
Malware & Viruses	Malicious software that damages your computer or steals data. Spread via downloads, USB, email.	Use antivirus software. Only download from trusted websites.
Online Predators	People who pretend to be someone else online to harm children.	NEVER share personal info with strangers. Tell a trusted adult if someone makes you uncomfortable.

Common Internet Risks — Part 2

Risk	What It Is	How to Stay Safe
Privacy Violations	Sharing too much personal info online (address, phone number, daily routine) that can be exploited.	Adjust privacy settings. Think before you post. Share only what is necessary.
Misinformation / Fake News	False information spread online that misleads people.	Verify information from at least TWO reliable sources before believing or sharing.
Inappropriate Content	Harmful, violent, or age-unsuitable content on the internet.	Use safe search settings. Report inappropriate content.
Piracy	Illegally downloading/sharing copyrighted material (music, films, software).	Only use licensed or free/open-source content. Piracy is against the law.
Internet Addiction	Excessive time online affects schoolwork, health, sleep, and real-life relationships.	Set time limits. Take regular breaks. Prioritise offline activities.



Scenario Discussion — What Would You Do?

In pairs, read each scenario and decide: What is the risk? What should the person do?

Scenario A

Tendo receives an email saying: 'YOUR BANK ACCOUNT HAS BEEN SUSPENDED. Click here to verify your password.' The email comes from support@bankuganda-secure-login.com

Scenario C

Brian wants to watch a new movie. A website offers it for free download. He doesn't recognise the website but the download button is very tempting.

Scenario B

Grace receives anonymous messages on WhatsApp calling her ugly and threatening to share her photo. She feels scared and embarrassed.

Scenario D

Someone claiming to be a 17-year-old student asks Amara to share her home address so they can 'study together.'

Activity 3.2 — Internet Safety Research Report

Group Activity (3–4 students). Choose ONE risk to research in depth:

Group 1: Cyberbullying | Group 2: Phishing & Online Scams | Group 3: Malware & Viruses
Group 4: Privacy & Personal Data | Group 5: Fake News / Misinformation

Your Report Must Include:

1. 1. DEFINITION — What exactly is this risk? Explain in simple language.
2. 2. HOW IT HAPPENS — Give a realistic example/scenario showing how someone encounters this risk.
3. 3. SIGNS TO WATCH FOR — How would you recognise if this is happening to you or someone else?
4. 4. IMPACT — What damage can this cause (emotional, financial, physical, social)?
5. 5. PROTECTION — At least FIVE specific steps someone can take to avoid or deal with this risk.
6. 6. LOCAL CONTEXT — Is this common in your community? Have you or anyone you know encountered it?



10 Golden Rules for Safe Internet Use

1. NEVER share your passwords with anyone — not even your best friend.
2. Use strong passwords: at least 8 characters with letters, numbers, and symbols.
3. NEVER share personal details (full name, address, school, phone number) with strangers online.
4. Think before you post: once something is online, it may be impossible to fully remove.
5. If something online makes you uncomfortable, STOP and tell a trusted adult immediately.
6. Only download files from trusted, well-known websites.
7. Keep your antivirus software updated on your computer.
8. Verify information before believing or sharing it — always check trusted sources.
9. Be kind online. Treat others the way you want to be treated — your cyber behaviour has real consequences.
10. Regularly update your privacy settings on all social media accounts.

How to Create a Strong Password

A strong password is your first line of defence online.

Weak Password Examples ❌

- password123
- yourusername2008
- 12345678
- yourname

Strong Password Rules ✅

- At least 8 characters long
- Mix of uppercase and lowercase letters
- Include numbers (e.g., 3, 7, 9)
- Include symbols (e.g., @, #, !)
- Do NOT use your name, birthday, or school

Example of a Strong Password: Ug@nda#2025!Safe

 **Challenge: Create a strong password you will remember but no one else can guess. Share ONLY the structure, not the actual password!**

How to Evaluate Information — Is It Reliable?

Not all information online is true. Use the CRAAP Test to evaluate any source:

Letter	Stands For	Questions to Ask
C	Currency	When was the information published or last updated? Is it recent enough for your topic?
R	Relevance	Does the information relate to your topic or answer your question? Is it appropriate for your level?
A	Authority	Who created this information? Are they an expert? Is the source credible (e.g., .gov, .edu, .org)?
A	Accuracy	Is the information supported by evidence? Can you verify it in another reliable source?
P	Purpose	Why was this information created? To inform, sell, persuade, or entertain? Could it be biased?

 **Practice: Apply the CRAAP Test to a Wikipedia article vs a .gov website. Which scores higher?**

Topic 7 Summary — Key Takeaways

-  Information can be accessed ONLINE (internet) and OFFLINE (encyclopaedias, databases).
-  Microsoft Encarta is discontinued (2009). Encyclopaedia Britannica is now online.
-  Different technologies (Email, Bluetooth, USB, Cloud) suit different situations.
-  The internet has serious risks: phishing, malware, cyberbullying, fake news, and more.
-  Always VERIFY information before sharing it — use at least TWO trusted sources.
-  Protect yourself with strong passwords, privacy settings, and safe browsing habits.
-  THINK before you post — the internet never truly forgets.
-  If you feel unsafe online, STOP and tell a trusted adult immediately.

Quick Check Answers — Were You Right?

Statement	Answer	Explanation
1. The internet is the only way to access information.	FALSE	Offline resources (encyclopaedias, CD-ROMs, library databases) also work.
2. Bluetooth can share files without the internet.	TRUE	Bluetooth works wirelessly over short range (~10m) without internet.
3. Phishing is a type of fish found in Uganda.	FALSE	Phishing is a cyber attack where fake sites/emails steal your personal information.
4. You can spread a virus using a USB flash drive.	TRUE	USB drives can carry malware that infects any computer they are plugged into.
5. Microsoft Encarta is still regularly updated.	FALSE	Encarta was discontinued in 2009 and fully shut down by 2011.

End of Topic 7

Information Access and Sharing

Homework / Extension Tasks:

1. Find ONE example of fake news or misinformation you have seen recently. Write a paragraph explaining why it is false and how you identified it.
2. Apply the CRAAP Test to two websites you use for school research. Rate each one and justify your rating.
3. Create a SAFETY TIPS POSTER (hand-drawn or digital) for your school's ICT lab based on the 10 Golden Rules.

Next Topic: Topic 8 — Introduction to Spreadsheets