Citizenship and Social Development

Theme 3: Interconnectedness and Interdependence of the Contemporary World

Topic: Technological development and information literacy

Learning Focus:

Relationship between Information Literacy and Positive Values;

Identifying False Information; Morals and Conduct in Using

Technologies; Observing the Relevant Laws

March 2023

(Translated version)

Learning Objectives

Knowledge

- To understand what is information literacy

- To understand the impact of information technology on social development

- To understand the morals and conduct, as well as relevant legal norms, in using information technology

Skills

- To develop critical thinking skills so as to discern the authenticity of information, think rationally, reflectively and independently to become lifelong learners

Values

- To build up information security awareness

- To cultivate morals and conduct in using media information , becoming law-abiding and responsible citizens in protection of public interests

Lead-in

Class Vote on the habits of using the Internet

a. Social networking

b. Searching Information

c. Reading news/ articles

d. Online shopping

e. Watching video clips

f. Playing computer games

g. Doing school assignments

❓ Sharing

Please share if you have any personal encounter with cyber pitfalls, such as being deceived into revealing personal data, unintended connection to websites with undesirable notions.

【Teachers can also remind students the dangers of telephone scams.】

Activity

Discussion:

- If your friends were interested in the position after reading the following recruitment message, how would you talk them out of it?

Click on the image and watch the video to learn about the relevant crime and responding strategies

Source: Anti-Deception Coordination Centre – Anti-Scam Videos: "Employment Fraud"

https://www.adcc.gov.hk/en-hk/video-detail/video-14920397275515521026.html

Source:
Anti-Deception Coordination Centre - Employment Fraud: "Click Farm"

https://www.adcc.gov.hk/en-hk/alerts-detail/alerts-1509000900093759490.html

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Information Literacy

Information technology can improve quality of life and foster social and economic development. Hong Kong, being one of the leading digital cities in the world, digital lifestyle and work patterns have been blended into different sectors of the society. However, not every "person" and "story" on the Internet is entirely true. Using media information and information technology ethically, lawfully and responsibly is an important literacy in the knowledge-based society today.


Source: EDB Educational MultiMedia

Information Literacy

Information literacy refers to the relevant ability and attitude that enable students to use information effectively and ethically.

1. Generic Information Literacy Skills

Identify and define a need for information	Locate and access relevant information	Evaluate information, media content and information sources/providers	Extract and organise information, create and present new ideas
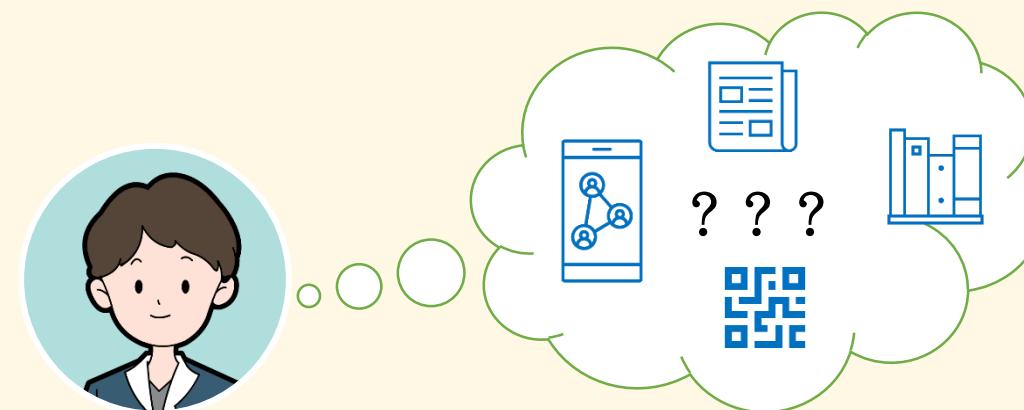
Reference information: "Information Literacy for Hong Kong Students" Learning Framework (Updated Version) (Draft)

Information Literacy

2. Consider the following when using and sharing information:

Respect intellectual property rights, including copyright and Creative Commons

Beware of possible dangers and risks on the Internet (e.g. cyber-bullying and infringement of intellectual property rights)

Protect privacy rights of oneself and others

Provide information in consideration of diverse perspectives and representations and be aware of how editing shapes meaning in visual media and their messages (e.g. omission of alternative perspectives, filtered or implied viewpoints and emphasis on specific ideas)

Communicate information properly in relevant contexts appropriately under proper situation

Information Literacy

3. Recognise the roles and functions of information providers of the information world, including:

- apply information technology skills and identify a need for information; locate and access relevant information; evaluate, extract and organise information; and create new ideas.
- recognise the roles and functions of information providers (e.g. libraries, museums, the Internet) in society
- share information and media content safely, responsibly and legally

In an information society, every citizen should become a responsible information provider. They should be able to judge if the behaviour of information providers is ethical and lawful, and to analyse the accuracy, accountability and transparency of the information received and distributed.

Please refer to the following information for other content related to information literacy.

Information Literacy

In terms of accuracy, accountability and transparency of information, what are the differences between the following information providers? Which one is more credible? Why?

- The "UNESCO Public Library Manifesto" proclaims the belief in the public library as a living force for education, culture and information, and as an essential agent for the fostering of peace and spiritual welfare through the minds of men and women.

- Through museums' collections, the public can discover a composite picture of our culture, history and heritage. By conserving a cultural legacy that is accessible, museums provide a lifelong learning platform for the community to foster their imagination and creativity

- Everyone can receive and distribute information on the Internet, which is now more than just an information source or research tool. It provides a great deal of opportunities for us to work, transact, communicate, learn and play.

Sources:
- Hong Kong Public Libraries – Introduction https://www.hkpl.gov.hk/en/about-us/intro/intro.html)
- LCSD Museums – About Us (https://www.museums.gov.hk/en/web/portal/about-us.html)
- InfoSec – Proper Use of the Internet (https://www.infosec.gov.hk/en/best-practices/person/proper-use-of-the-internet)

Information Literacy – Various Information Providers

? Think about it

What should we be aware of when selecting information from newspapers and websites of various organisations?

- The background of the information provider, such as its standpoint or potential commercial interests behind;

- The availability of credential proof of the evidence, data and information sources provided, etc;

- Judge the representations of the information provided by information providers to identify misrepresentations or lack of representation;

- Whether the information is being generalised or exaggerated …

Moreover, we should also compare different information and perspectives to gain a better understanding of the matters being discussed.

Information Literacy – Various Information Providers

❓ Do you know we can also view online about museums' exhibits and its synopsis?

Examples of online museums

❓ How do library systems search and select appropriate information and books?

Multimedia Information System (MMIS), is an online platform of the Hong Kong Public Libraries, which integrates digital collections, multimedia materials and e-books, allowing citizens to browse a variety of digital information anytime and anywhere.

Click on the image to watch the video

Source: Multimedia Information System User Guide of Hong Kong Public Libraries (https://www.youtube.com/watch?v=OLCy0NKrBDE&list=PLA6pE89vH1ZqgzJtzC7f84Y1dineSk9Vw)

Information Literacy – Various Information Providers

? Discussion:

- Do you think "Virtual Travel" can replace physical travel? Why?
- To gain a comprehensive understanding of the culture of a certain place, how can web information, physical travel, reading and thinking help in the process?

When the epidemic situation remained unsettled in various countries, quite a number of enterprises begin to use innovative technology, such as virtual guided tours, virtual reality (VR) videos and live guided tours to create a brand-new travel experiences for the public to travel even at home.

However, virtual travel cannot replace real travel for the person to experience, and communicate with the locals, and through readings to gain a comprehensive understanding of the local place. Even though information technology enables virtual travel experiences, it is just one of the ways to learn about a place.

Click on the image for a virtual experience

Sources:
- EdPost – Virtual Travel (踏上這虛擬旅途)
  (https://www.edcity.hk/hq/en/content/%E8%B8%8F%E4%B8%8A%E9%80%99%E8%99%9B%E6%93%AC%E6%97%85%E9%80%94)
- Ngong Ping 360 (https://www.np360.com.hk/en/explore-np360/virtual-visit)

False Information and Its Damages

- Have you ever believed /shared unverified messages from social media?

- In your opinion, how to identify false information?

Click on the image to watch the video

▶ **Examples of Types of Untrue Information**

- **Disinformation**: false information that is deliberately forged

- **Misinformation**: factually incorrect information due to human error, incomplete information or other factors

False information includes fake news. Though false information is not a new phenomenon, with the ubiquity of the Internet and social media networks in the digital age, fake news can be more easily spread.

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False Information and Its Damages

Based on the following conversation, which areas do you think are worthy of attention?

(simulated conversation)

(1) Unspecified source of information. For example, only "a friend" is mentioned, without any links to websites to verify the authenticity of the information.

(2) Believing in or even spreading the information received without making further questions/ inquiries.

(3) Wrong concepts. The belief of "I would rather believe it" does not help with your search for facts and truth.

Source: Senior Secondary Citizenship and Social Development X Information Literacy – COVID-19: "Identifying False Information" (https://cs.edb.edcity.hk/file/public/self_learning/sl_covid19_ppt_s.pdf)

False Information and Its Damages

In the era of information explosion, there are all sorts of information in society. An ordinary citizen can also publish a news story, while messages distributed by anyone through computers or mobile phones can be widely circulated. The authenticity of information is hard to identify, bringing troubles to our life and might even result in making wrong decisions and great damages.


抗疫新戰線
疫情下的社交媒體

Click on the image to watch the video

Source of the video: China Current
(https://chinacurrent.com/hk/story/20374/social-media-in-pandemic)

👁 The truth is…

(1) The Chief Executive appealed to the citizens not to believe in rumours and panic.

Relevant news/information:
- CE meets Mainland medical experts, 28 February 2022. Retrieved from news.gov.hk
(https://www.news.gov.hk/eng/2022/02/20220228/20220228_204935_303.html)
- Stay Calm and Say No to Rumours (〈保持冷靜 勿信謠言〉), 28 February 2022.
Retrieved from Tamar Talk (https://www.facebook.com/TamarTalk.hk/)

(2) On its government's social media page, a spokesman condemned those who have spread rumours online and caused public panic. Should any criminal elements be involved, the law-enforcement agencies would take action seriously.

明辨資訊真偽

Source: EDB EMM

Source: Senior Secondary Citizenship and Social Development X Information Literacy – COVID-19: "Identifying False Information"
(https://cs.edb.edcity.hk/file/public/self_learning/sl_covid19_ppt_s.pdf)

False Information and Its Damages

▶ Proliferation of Disinformation Caused Damages No Less than Viruses

There was a proliferation of disinformation during the COVID-19 pandemic. According to a study published by the *British Medical Journal*, over one-fourth of YouTube's most viewed videos on COVID-19 contained misleading information, two of which are included as follows:

- It was circulated on social media that a student of a prestigious school in India discovered the cure for COVID-19 - simply taking a mixture of a tablespoon of black pepper and two tablespoons of honey consecutively for five days – which had been approved by the World Health Organization.

- At the onset of the pandemic, someone spread the news that that the new 5G communications technology has been used to facilitate the transmission of the virus, resulting in some 5G network towers destroyed globally.

To counter the surge of false information, the UN launched new initiative to fight COVID-19 misinformation through 'digital first responders' in May 2020.

▶ Beware of Clickbait

Beware of phishing websites, links and messages:

1. Do not download suspicious files and applications, or open hyperlinks or attachments from unknown sources (e.g. emails, instant messaging, SMS messages, QR codes, websites).

2. Beware of adware and malware: During the installation of freeware and shareware, it may be implied that you have agreed to install adware. Therefore, terms of use should be read carefully. Some applications are even embedded with Trojan viruses for hackers to clandestinely monitor users' activities on mobile phones after users download such applications.

Click on the image to watch the video

Source: Phishing Agent, Anti-Deception Coordination Centre of the Hong Kong Police Force (https://www.adcc.gov.hk/en-hk/video-detail/video-1495611268484386817.html)

Source: Watch out for mobile applications planted with Trojan viruses, Anti-Deception Coordination Centre - (https://www.adcc.gov.hk/en-hk/alerts-detail/alerts-1444920522323329026.html)

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False Information and Its Damages

➤ Combating Fake Information with Laws

- The Internet has surpassed television as the most trusted news source for citizens, with websites being the primary source of news information for most of them. Online platforms, however, are also seen as major channels for spreading false information. Many citizens have encountered or even believed in such information.

- The Basic Law protects the freedom of speech of Hong Kong residents, but such freedom is not without bounds. Under the existing legal framework, the police can take enforcement actions according to the Crimes Ordinance or the National Security Law if anyone disseminates inappropriate information.

Source of the image:
https://www.facebook.com/HongKong PoliceForce/posts/3869919946429274/

Sources:
- The Legislative Council of the Hong Kong Special Administrative Region
  (https://www.legco.gov.hk/research-publications/english/essentials-1920ise10-measures-to-tackle-online-disinformation.htm)
- Press Releases of the Hong Kong Government (https://www.info.gov.hk/gia/general/202107/21/P2021072100741.htm)

Strategies for Identifying False Information

Smart Tips for Spotting Fake News

1. Pay attention to the headline/content
Don't believe in exaggerated headlines. Read the entire article to have a better understanding of the incident.

2. Check the source
Browse relevant webpages to check the background of the information provider to see if the source is reliable. Fake websites often make minor changes to the URLs of the actual websites to mislead readers.

3. Check the date/location
Check if the message is a repost of old news and verify if the incident concerned actually happened in the mentioned location.

4. Verify the photos
Check whether the photos have been altered, and whether they are related to the content of the message.

5. Check the language
If the website is filled with spelling and grammatical mistakes, the information it provides could be unreliable.

6. Verify the information
Cross-check the information with other reliable sources to see if there are similar reports.

7. Joke? Ad? Personal opinion?
A message that has been highly exaggerated is likely to be a joke/satire. Also pay attention to product promotion ads that imitate news reports. Evaluate whether the message is solely a personal opinion.

8. Ask an expert
Consult an expert or verify the information on fact-checking websites.

Source: EDB's Smart Tips for Spotting Fake News
https://www.edb.gov.hk/attachment/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/Information-Literacy/Smart_Tips_for_Spotting_Fake_News_eng_poster.pdf)

教育局
Education Bureau

家福會
HKFWS

Strategies for Identifying False Information

How to Identify Fake News and Misinformation

We may verify online information by the following methods:
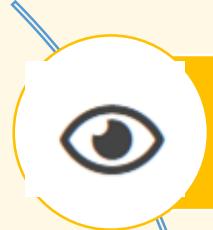
Identify the source of information. Try to search relevant news published by different media which hold different stances. Take a multi-angles view.

Be cautious of titles or messages that contained "There are sources saying that", "may", etc. These words indicated those contents have not yet been verified. Please apply the "fact-checking" approach even when some content states "Fact checked", "FCed".
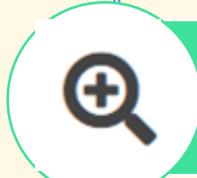
If you suspect that the content has been modified, you may enter part of the content into a search engine, and put keywords in a double quotation marks (" ").
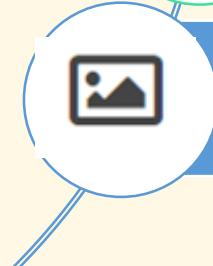
If you suspect the source of an image, you may try to search the image in a search engine to look for other image sources.

Strategies for Identifying False Information

We should think carefully about the following when receiving information on the Internet.

- Who has produced the message?
- Who has forwarded the message to me?
- What should I do after receiving the message?
- What is included in the message, and where can I find out the authenticity of the content?
- If I forwarded unverified messages, what would the serious consequences be?

Strategies for Identifying False Information

▶ Stay Vigilant against Cyber Pitfalls

We must be vigilant against all sorts of cyber pitfalls. Some examples of online frauds are set out below.

Romance Scam

Click on the image to watch the video

Source: Love player, the Anti-Deception Coordination Centre of the Hong Kong Police Force (https://www.adcc.gov.hk/en-hk/video-detail/video-1493053211351011330.html)

Emails of Unknown Sources

Click on the image to watch the video

Source: Learn these tips to protect against phishing and malware, Hong Kong Computer Emergency Response Team Coordination Centre (https://www.youtube.com/watch?v=aWk7LPO5zs4)

Online Self-harm Challenges

Click on the image to watch the video

Source: Blue Whale: A Death Trap Rather than Game (「藍鯨」陷阱·唔係講玩), The Hong Kong Police Force (https://zh-hk.facebook.com/HongKongPoliceForce/videos/%E8%9 7%8D%E9%AF%A8%E9%99%B7%E9%98%B1%E5% 94%94%E4%BF%82%E8%AC%9B%E7%8E%A9/147 5859745835318/)

Strategies for Identifying False Information

▶ Stay Vigilant against Cyber Pitfalls

Social Media Deception

Click on the image to watch the video

Source: Beware of Social Media Deception - Introduction to Naked-Chat Scam, the Anti-Deception Coordination Centre of the Hong Kong Police Force (https://www.adcc.gov.hk/en-hk/video-detail/video-14449205331655604866.html)

Online Shopping Scam

Click on the image to watch the video

Source: The Anti-Deception Coordination Centre of the Hong Kong Police Force (https://www.adcc.gov.hk/en-hk/video-detail/video-1444920533962522626.html)

Instant Messaging Account Hacked

Click on the image to watch the video

Source: Cyber Crime - Instant Messaging Account Hacked (《網罪速「逮」》「避開即時通訊軟件帳號被騎劫」), Office of the Government Chief Information Officer (https://www.youtube.com/watch?v=gicA-7WfcD8)

Morals and Conduct in Using Technologies

Exploration is boundless, but behaviour should be bound by ethics

- The development of technologies, such as the Internet, big data and artificial intelligence, is accelerating and becoming more complex, uncontrollable and unpredictable. Information technology brings convenience and solution to our daily life, while giving rise to privacy concerns and cybercrimes.
- There is no good or evil in using science and technology. It can be a tool to contribute to human well-being in society, as well as commit crimes and create damages. In scientific and technological research, the concern of action is "can or cannot", while scientific and technological ethics is about "should or should not". Compliance with ethics and laws is required in using information technology.

從STEM教育到關愛社群

例如我不增長穿線，就會責打開

Click on the image to watch the video

Example: Students from a local secondary school gave a hand to the needy in Africa by learning the manufacturing of 3D-printed prostheses. The school contacted a group specialised in producing prostheses for collaboration with its teachers and students. Through this STEM learning activity, teachers strengthen students' collaboration and problem-solving skills, and cultivated in them positive values and attitudes, such as respect for others, care for others and empathy. *(EDB has been implementing STEAM education.

For details: https://www.edb.gov.hk/en/curriculum-development/kla/ma/res/stemexamples.html)

Source of the video: From STEM Education to Caring about Community – Assembling 3D Prostheses, EDB EMM (https://emm.edcity.hk/media/t/1_xges1mm4)

Morals and Conduct in Using Technologies

➤ Technological Innovation Should Be Bound by Ethics

✔ The State has also issued the "Ethical Norms for the New Generation Artificial Intelligence" (hereinafter referred to as the "Ethical Norms") in September 2021. This is the first national policy document on ethics of artificial intelligence, proposing systematic design and opinions on an ethical system for technology with Chinese characteristics from various perspectives, including the general requirements, ethical principles, ethical governance structure, ethical governance system, review and supervision, education and promotion.

✔ The "Ethical Norms" take into account privacy, prejudice, discrimination, fairness and other ethical concerns, and include, among others, general principles, ethical norms for specified activities, organisation and implementation.

✔ The "Ethical Norms" propose six basic ethical requirements, including improving human well-being, promoting fairness and justice, protecting privacy, ensuring controllability and reliability, strengthening accountability and enhancing ethical literacy. Meanwhile, 18 specific ethical requirements, including management, research and development, supply and usage of artificial intelligence, are put forward.

中华人民共和国科学技术部
Ministry of Science and Technology of the People's Republic of China

Click on the image for details

Source: Ministry of Science and Technology of the People's Republic of China (http://www.most.gov.cn/kjbgz/202109/t20210926_177063.html)

Morals and Conduct in Using Technologies

▶ Technological Innovation Should Be Bound by Ethics

- Technology ethics are the values and norms of behaviour to be observed in carrying out technological activities including scientific research and technological development, as well as the important protection for promoting healthy development of technology businesses. In the light of this, the State has issued the "Guidelines to strengthen the governance over ethics in Science and Technology" in March 2022.

- This is the first guideline on the governance over ethics of technology at the national level, it also proposes basic requirements such as ethics compliance should be emphasized throughout the process of scientific research and technological development,

Click on the image for details

Source: The Chinese Government's website
- http://www.gov.cn/zhengce/2022-03/20/content_5680105.htm
- http://www.gov.cn/zhengce/2022-03/31/content_5682767.htm

Five principles of technology ethics indicated in the "Guidelines to strengthen the governance over ethics in Science and Technology" :

1) To serve the well-being of humanity

2) To respect people's right to life

3) To adhere to fairness and justice

4) To control risks in an appropriate way

5) To maintain openness and transparency

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Morals and Conduct in Using Technologies

▶ Technological Innovation Should Be Bound by Ethics

The development or use of artificial intelligence systems that involve the use of personal data or the identification, assessment or monitoring of individuals would potentially impact the privacy of individuals in relation to person data. The Office of the Privacy Commissioner for Personal Data, Hong Kong has formulated the "Guidance on the Ethical Development and Use of Artificial Intelligence" in August 2021 aims to facilitate the healthy development and use of artificial intelligence in Hong Kong and to assist organisations in complying with the provisions of the Personal Data (Privacy) Ordinance (Cap. 486) ("PDPO") in their development and use of artificial intelligence.

Guidance on the Ethical Development and Use of
Artificial Intelligence

Click on the image for details

Ethical AI

Three Data Stewardship Values
- Being Respectful
- Being Beneficial
- Being Fair

Seven Ethical Principles for AI
- Accountability
- Human Oversight
- Transparency and Interpretability
- Data Privacy
- Fairness
- Beneficial AI
- Reliability, Robustness and Security

Four Major Business Processes
- AI Strategy and Governance
- Risk Assessment and Human Oversight
- Development of AI Models and Management of AI Systems
- Communication and Engagement with Stakeholders

Source: Office of the Privacy Commissioner for Personal Data, Hong Kong (https://www.pcpd.org.hk/english/resources_centre/publications/files/guidance_ethical_e.pdf)

Morals and Conduct in Using Technologies

> It is hard for the existing policies and regulations to keep up with technological innovation which should be bound by ethics. The European Union issued the ethics guidelines and legal framework for artificial intelligence.

In April 2019, the European Union issued the first ethics guidelines for artificial intelligence and listed seven key requirements, including:

- Human agency and oversight
- Technical robustness and safety
- Privacy and data governance
- Transparency
- Diversity, non-discrimination and fairness
- Societal and environmental well-being
- Accountability

In April 2021, the European Union issued a proposal for a regulation on, and provided a legislative framework for, artificial intelligence.

Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL
LAYING DOWN HARMONISED RULES ON
ARTIFICIAL INTELLIGENCE (ARTIFICIAL
INTELLIGENCE ACT) AND AMENDING CERTAIN
UNION LEGISLATIVE ACTS

Source: European Commission
(https://ec.europa.eu/futurium/en/ai-alliance-consultation.1.html)
(https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52021PC0206&from=EN)

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Morals and Conduct in Using Technologies

✔ In November 2021, UNESCO member states adopted the Recommendation on the Ethics of Artificial Intelligence, which sets a global normative framework while giving member states the responsibility to apply it at their level.

The Recommendation on the Ethics of Artificial Intelligence

Click on the image for details

UNESCO
(https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence)

Morals and Conduct in Using Technologies

The rules of etiquette are as important on online social platform as they are in the daily life. It is common to cause misunderstanding in online communication where text and emoji are frequently used. Besides, due to the anonymity and instantaneity on the Internet, some people's online behaviour may fail to meet the moral standards in the reality. Therefore, the following "netiquette" should be observed.
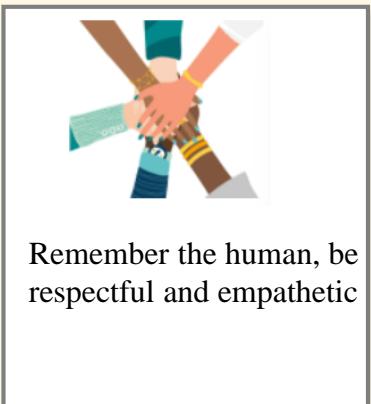
Remember the human, be respectful and empathetic
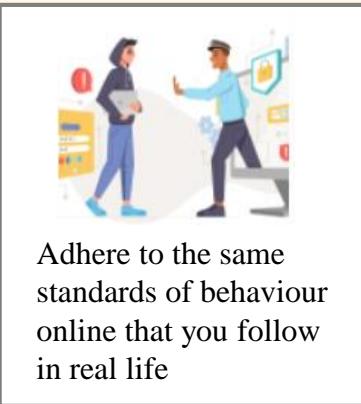
Adhere to the same standards of behaviour online that you follow in real life

Know where you are in cyberspace and the unwritten rules

Help keep flame wars under control

Respect other people's privacy

Respect other people's time and bandwidth, think carefully before forwarding messages
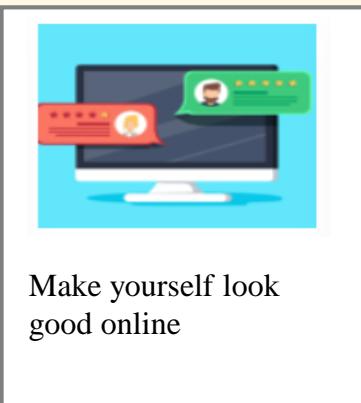
Make yourself look good online

Share expert knowledge

Be forgiving of other people's mistakes

Don't abuse your power, make appropriate use of your capacity as a group administer

Click on the image to watch the video and visit the website to learn about netiquette in detail.

Respecting Others, Observing Laws

In response to issues, such as the spread of disinformation and abuse of personal information, that come along with the convenience offered by information technology, various countries and regions have strengthened the legislation and enforcement in the domain of information technology, with an aim to safeguard national security, maintain social stability and protect personal rights and interests.

Source of the image:
EDB EMM

Given the rapid development and penetration of information technology, the formulation of and amendments to laws are of utmost urgency.

The current development and penetration of the Internet:

- As of August 2022, the number of netizens in our country continued to grow steadily, recording an increase in netizen population and Internet penetration rate by 19.19 million and 1.4 percentage points respectively when compared to December 2021. There have been a more extensive collection and use of personal information.

- Based on the data published by the Census and Statistics Department in April 2021, more than 6 million persons aged 10 and over in Hong Kong used the Internet, representing a penetration rate of 92.4%.

Source:
- Statistical Report on China's Internet Development, August 2022 (http://www.cnnic.net.cn/n4/2022/0914/c88-10226.html)
- Thematic Household Survey Report No. 73 - Information technology usage and penetration, Census and Statistics Department 《 (https://www.censtatd.gov.hk/en/data/stat_report/product/C0000031/att/B11302732021XXXXB0100.pdf)

Respecting Others, Observing Laws

In the information age, the use of information technology system is applied in nearly everywhere in our society, such as public transportation, communications networks and all kinds of business operations. Criminal damages to these systems create serious impact. The Internet is in fact not above the law; in the event of incompliance with legal requirements or infringement of others' legitimate rights and interests, legal responsibility shall also be assumed.

Types of Computer Related Crime:

- crime that is directly targeted at the computer or computer system e.g. hacking into a server or defacing a web page

- crime that uses the Internet, e.g. Internet gambling or pornography

- crime that involves the retrieval of digital data of evidential value, e.g. fraud-data storage or payment records

Source: InfoSec, Office of the Government Chief Information Officer
(https://www.infosec.gov.hk/en/knowledge-centre/computer-related-crime)

Statistics on Technology Crime

Year	Computer crime figures	Total financial losses (HK$ million)
2014	6778	1201
2015	6862	1828
2016	5939	2300
2017	5567	1393
2018	7838	2771
2019	8322	2906
2020	12916	2964
2021	16159	3024

Source: Cyber Defender "Technology Crime Figures"
(https://cyberdefender.hk/en-us/statistics/)

Respecting Others, Observing Laws

Examples of Legal Responses to Inappropriate Use of Information Technology

Many countries and regions are committed to curbing the spread of false information through legislation and amendments to existing laws, in order to safeguard national security, maintain social stability and protect personal rights, interests and privacy.

In November 2020, the Government of Canada proposed a new Act to keep up with the need in the era of information and to better protect the privacy of its citizens.

Digital Charter Implementation Act, 2020

Source: Government of Canada
(https://www.ic.gc.ca/eic/site/062.nsf/eng/h_00108.html)
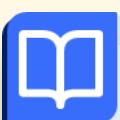
In February 2021, Singapore implemented in phases an act to strengthen the accountability of organisations, further enhancing the protection of personal data.

The Personal Data Protection Act (PDPA)

Source: Personal Data Protection Commission Singapore
(https://www.pdpc.gov.sg/Overview-of-PDPA/The-Legislation /Personal-Data-Protection-Act)

Observing the Relevant Laws

An example of the progress on the national legislation of information technology

According to Article 25 of Chapter II of the National Security Law of the People's Republic of China (2015), the State constructs a network and information security protection system to enhance network and information security protection capabilities. It also 加強網絡管理防範、制止和依法懲治網絡攻擊、網絡入侵、網絡竊密、散布違法有害信息等網絡違法犯罪行為維護國家網絡空間主權、安全和發展利益 (Chinese only).

The Cyber Security Law of the People's Republic of China was promulgated, covering network operations security, operations security for critical information infrastructure, network information security and other content.

2016

The Data Security Law of the People's Republic of China was adopted to regulate data processing and promote the development and utilisation of data.

June 2021

The Personal Information Protection Law of the People's Republic of China was adopted to protect the rights and interests on personal information.

August 2021

Teachers must pay heed to the latest publication of national regulation.

Sources:
- The National Security Law of the People's Republic of China, the Government of the People's Republic of China (http://www.gov.cn/zhengce/2015-07/01/content_2893902.htm)
- The Cybersecurity Law of the People's Republic of China, the Cyberspace Administration of China (http://www.cac.gov.cn/2016-11/07/c_1119867116.htm)
- The Data Security Law of the People's Republic of China, the National People's Congress (http://www.npc.gov.cn/npc/c30834/202106/7c9af12f51334a73b56d7938f99a788a.shtml)
- The Personal Information Protection Law of the People's Republic of China, the National People's Congress (http://www.npc.gov.cn/npc/c30834/202108/a8c4e3672c74491a80b53a172bb753fe.shtml)

Respecting Others, Observing Laws

Most of the ordinances targeting crime prevention in Hong Kong also apply in the cyber world of the Internet, for example:

Examples of relevant legislation on computer crimes:

- Crimes Ordinance (Cap. 200) S.161 Access to computer with criminal or dishonest intent

- Telecommunications Ordinance (Cap. 106) S.27A Unauthorised access to computer by telecommunications

- Theft Ordinance (Cap. 210) seeks to combat such offences as destroying, defacing, concealing or falsifying any record, including a record kept by means of a computer.

- Control of Obscene and Indecent Articles Ordinance (Cap. 390)

- Prevention of Child Pornography Ordinance (Cap. 579) S.3 - Any person who prints, makes, produces, reproduces, copies, imports, exports, publishes, has in his/her possession and advertises any child pornography commits an offence (child pornography includes computer-generated images or visual depiction made or generated by electronic means, etc.).

Click on the images to watch the videos

Sources:
- Crime Prevention – Email Scam (《罪案呼籲—電郵騙案》), the Hong Kong Police Force (https://www.youtube.com/watch?v=CDNZbVaTTuk&list=PLslN1DbNu8TNW4lJuneFpWAiKmVvk99z4&index=34)
- InfoSec, Office of the Government Chief Information Officer (https://www.infosec.gov.hk/en/useful-resources/related-ordinances)
- Closer Look · More Knowledge: Information 11 (《睇真D·知多D：第十一則資訊》), the Information Services Department (https://www.youtube.com/watch?v=U2ewaYnh99I&list=PLSIOvjUwNfl64uq_-QxEVERZu_EdiRpzS&index=23)

Respecting Others, Observing Laws

Examples of relevant legislation on computer crimes:

- Gambling Ordinance (Cap. 148) combats illegal gambling, including those conducted on the Internet.
- Unsolicited Electronic Messages Ordinance (Cap. 593) prohibits fraud activities related to the sending of multiple commercial electronic messages.
- Electronic Transactions Ordinance (Cap. 553) gives electronic records and digital signatures used in electronic transactions the same legal status as that of their paper-based counterparts.
- Copyright Ordinance (Cap. 528) provides comprehensive protection for recognised categories of works, including those made available to the public on the Internet.
- S. 13B, Smoking (Public Health) Ordinance (Cap. 371) prohibits the placing of tobacco advertisements on the Internet.
- Personal Data (Privacy) Ordinance (Cap. 486) protects the privacy interests of living individuals in relation to personal data.

《2021年個人資料(私隱)(修訂)條例》短片

最高罰款100萬元及監禁5年

Click on the image to watch the video

The amended provisions of the Personal Data (Privacy) Ordinance targeted on doxxing took effect on 8 October 2021. The Ordinance criminalises doxxing acts and provides the Commissioner with statutory powers to conduct criminal investigations and enforce the law, including the powers to serve cessation notices to demand actions to cease or restrict disclosure of doxxing content.

Sources:
- InfoSec, Office of the Government Chief Information Officer (https://www.infosec.gov.hk/en/useful-resources/related-ordinances)
- A video of the Office of the Privacy Commissioner for Personal Data, Hong Kong, on the Personal Data (Privacy) (Amendment) Ordinance 2021 (https://www.pcpd.org.hk/english/doxxing/index.html)

Respecting Others, Observing Laws

Respecting Intellectual Property Rights

- Intellectual property rights broadly refer to intangible property, including copyright, patents, and designs. Many things in our daily life, such as toys, books, TV programmes, pop songs, films and fashion designs, are closely related to intellectual property rights.

- Information on the Internet is also protected by intellectual property rights. We should not download songs, videos or images from illegal platforms and avoid mutual sharing of these files among friends.

- Respecting intellectual property rights is our civic responsibility. If we infringe such rights at will, it is not only against the law, but also causes loses to the creators who might even lose the resources and motivation for creation. As a result, we might no longer be able to see their outstanding works in the future.

Click on the image to watch the video

Source:
- HKedCity (https://www.edcity.hk/hq/zh-hant/content/%E4%BF%9D%E8%AD%B7%E7%9F%A5%E8%AD%98%E7%94%A2%E6%AC%8A%E3%80%80%E4%BD%A0%E6%88%91%E6%9C%89%E8%B2%AC)

- Intellectual Property Department of the Hong Kong Special Administrative Region
https://www.youtube.com/watch?v=f7p6CjSRGRE
https://www.youtube.com/watch?v=FsNZO5IwIpc

Respecting Others, Observing Laws

▶ The Importance of Protecting Personal Data with Laws

Case

- In January 2020, Dixons Carphone, an electronic and telecommunications retailer in Europe, was fined by the British authorities for its failure to protect customers' data during a cyberattack where a hacker stole the personal information of 14 million people, including transaction details of credit cards, and names, addresses or email addresses of customers.

ico.
Information Commissioner's Office

Source: Information Commissioner's Office
(https://ico.org.uk/media/action-weve-taken/mpns/2172972/carphone-warehouse-mpn-20180110.pdf)

Respecting Others, Observing Laws

▶ The Importance of Protecting Personal Data with Laws

In March 2020, Google was fined 75 million Swedish kronor by the Swedish authorities for failure to satisfy a user's request related to the "right to be forgotten"*. In July of the same year, Google was also fined 60 million euro by the Belgian authorities for not addressing in full a request of a Belgian public figure in respect of the right to erasure.

* The "rright to be forgotten" is also known as the "right to erasure"

Source: The European Data Protection Board (EDPB)
- https://edpb.europa.eu/news/national-news/2020/swedish-data-protection-authority-imposes-administrative-fine-google_en
- https://edpb.europa.eu/news/national-news/2020/belgian-dpa-imposes-eu600000-fine-google-belgium-not-respecting-right-be_en

What is the "right to be forgotten"?

European data protection law gives individuals the right to ask search engines like Google to delist certain results for queries related to a person's name. In deciding what to delist, search engines must consider if the information in question is "inaccurate, inadequate, irrelevant or excessive", and whether there is a public interest in the information remaining available in search results.

Source: Google Legal Help (https://support.google.com/legal/answer/10769224?hl=en-GB&sjid=2096973645437251399-AP)

Respecting Others, Observing Laws

▶ PCPD Made First Arrest after Criminalisation of Doxxing Acts

- After the Personal Data (Privacy) (Amendment) Ordinance 2021 took effect on 8 October 2021, the Office of the Privacy Commissioner for Personal Data carried out its first arrest action on 13 December according to the Ordinance. A 31-year-old man was suspected of breaching the Personal Data (Privacy) Ordinance by making doxxing acts due to monetary dispute and revealing the content and personal information of the subject individual on online platforms.
- The PCPD reminded the public that forwarding relevant doxxing content might be in violation of the law and called on them to abide by the law.

Reference information: PCPD
(https://www.pcpd.org.hk/english/doxxing/index.html)

Respecting Others, Protecting Ourselves

Beware of Cyber-bullying

What constitutes cyber-bullying? How should we prevent and handle it, and protect ourselves and others?

Cyber-bullying generally refers to bullying that involves the use of email, images or text messages sent to web pages, chat rooms, discussion forums, online gaming network, or other information and communication technology platforms. Behaviour of cyber-bullying includes harassment, denigration, disclosure of real-world identities, framing, impersonation, trickery and exclusion. Anyone can be a victim of cyber-bullying.

Click on the image to watch the video

Sources:
- Office of the Privacy Commissioner for Personal Data, Hong Kong (https://www.pcpd.org.hk/besmartonline/en/Cyber-bullying.html)
- Junior Police Call Shatin (https://www.youtube.com/watch?v=5ESSh0uyBMM)

Websites of Department of Health:
- https://www.studenthealth.gov.hk/english/internet/media/files/stand_against_cyber_bullying_post_b.pdf
- https://www.studenthealth.gov.hk/english/internet/media/files/stand_against_cyber_bullying_post_a.pdf

Respecting Others, Protecting Ourselves

Cyber-bullying involves privacy and legal issues. Internet users should respect others' privacy in the cyber world. There are points to note when posting or sending information on social media.

Click on the image for details

Source: Cyber-Bulling What You Need to Know, Office of the Privacy Commissioner for Personal Data, Hong Kong (https://www.pcpd.org.hk/english/resources_centre/publications/files/cyberbullying_e.pdf)
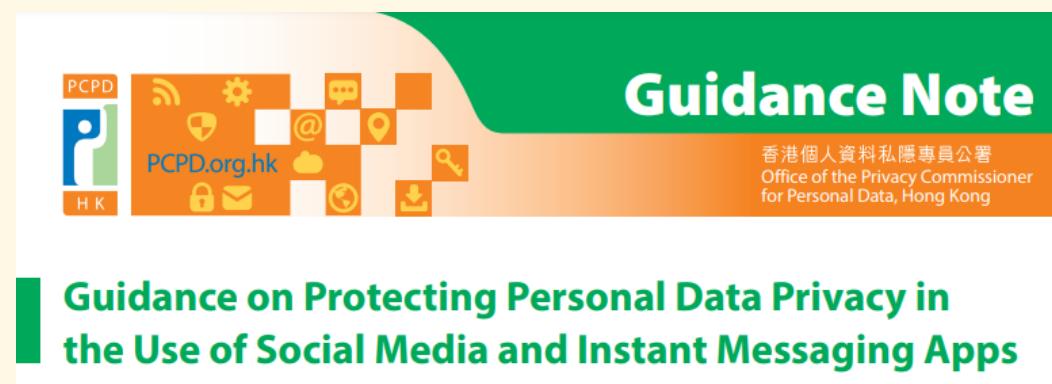
Click on the image for details

Source: Guidance on Protecting Personal Data Privacy in the Use of Social Media and Instant Messaging Apps, Office of the Privacy Commissioner for Personal Data, Hong Kong (https://www.pcpd.org.hk/english/resources_centre/publications/files/social_media_guidance.pdf)

Respecting Others, Observing Laws

Although it is convenient to leave comments and share information on the Internet, we must think twice before doing so, as the records of inappropriate speech and behaviour are difficult to remove from the Internet and they could cause damage to other people. Besides, the Internet is not above the law, we have to learn about the relevant laws and become an ethical and law-abiding citizen.

Be a responsible netizen:

- Do not store or disseminate any content which is likely to be offensive or obscene to a reasonable person
  Respect intellectual property rights, and share information without infringing the rights of other people
- Do not spread computer viruses or malicious codes, or hack into other computers
- Respect all other Internet users, do not threaten, harass, stalk or abuse anyone, etc.

Conclusion

- There is no boundary for scientific exploration, except for the application of science and technology. When delving into the realm of the unknown and developing advanced technology, we should follow a "people-oriented" principle, place emphasis on the ethics of science and technology, value morals and conduct, and respect the rights and privacy of other people.

- In response to the serious impact of crimes related to information technology on society, every country/ region has optimised various measures, including laws and regulations, to promote a healthy and orderly information society. Individuals should possess good information literacy, understand the legal, social and ethic responsibilities in using information technology – respecting the rights of other people, using information technology appropriately, observing relevant laws, maintaining public safety, becoming an informed, law-abiding and responsible citizen, using information technology lawfully and ethically, upholding positive values and behaviour, and sharing the convenience, benefits and opportunities brought by information technology.

Source of the image: EDB EMM

Further Reference

- Education Bureau - Information Literacy for Hong Kong Students (https://www.edb.gov.hk/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/Information-Literacy/il-s-resources.html)

- Education Bureau - Resources and Reference Materials relating to Information Literacy Education (https://www.edb.gov.hk/attachment/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/Information-Literacy/ResourcesAndReferenceMaterials(EH).pdf)

- Education Bureau – Values Education --Information Literacy Education – "Life Event" (https://www.edb.gov.hk/tc/curriculum-development/4-key-tasks/moral-civic/L_and_T/IT_Education/IT_Ed_Lea.html) (Chinese version only)

- Office of the Government Chief Information Officer – Cyber Security Information Portal · Learning Centre (https://www.cybersecurity.hk/en/learning.php)

- Office of the Government Chief Information Officer – InfoSec · Multimedia Centre (https://www.infosec.gov.hk/en/useful-resources/multimedia-centre)

- Office of the Government Chief Information Officer - Safe Online Social Networking (https://www.infosec.gov.hk/en/best-practices/person/safe-online-social-networking)

- Office of the Government Chief Information Officer - Using Instant Messaging Safely (https://www.infosec.gov.hk/en/best-practices/person/using-instant-messaging-safely)

Further Reference

- Office of the Privacy Commissioner for Personal Data, Hong Kong - The Personal Data (Privacy) Amendment Ordinance 2021 (https://pcpd.org.hk/english/data_privacy_law/amendments_2021/amendment_2021.html)

- Office of the Privacy Commissioner for Personal Data, Hong Kong - Introduction on EU General Data Protection Regulation (https://www.pcpd.org.hk/english/data_privacy_law/eu/eu.html)

- Office of the Privacy Commissioner for Personal Data, Hong Kong - Introduction on Personal Information Protection Law of the Mainland (https://www.pcpd.org.hk/english/data_privacy_law/mainland_law/mainland_law.html)

- Office of the Privacy Commissioner for Personal Data, Hong Kong – Leaflets/Booklets under Resources Centre (https://www.pcpd.org.hk/english/resources_centre/publications/booklets/booklets.html)

- Hong Kong Federation of Youth Groups - M21 Internet Education Resource Kit (https://m21.hk/medialiteracy/)

- Cyber Defender (https://cyberdefender.hk/en-us/)

- Anti-Deception Coordination Centre (https://www.adcc.gov.hk/en-hk/home.html)

- Cyber Security and Technology Crime, Hong Kong Police Force (https://www.police.gov.hk/ppp_en/04_crime_matters/tcd/)

User Guide

- The primary users of this resource are teachers. It aims to provide teachers with content knowledge relevant to the topic to enable teachers to have a deeper understanding of teaching content when preparing for their lessons.

- All data, videos, photos, pictures, questions and suggested answers can be used for multiple purposes, such as teachers' teaching materials, references for curriculum planning and learning and teaching, and student assignments, etc. To align with Citizenship and Social Development Curriculum and Assessment Guide (Secondary 4-6) (2021) (C&A Guide), this resource should be adapted to cater for students' learning diversity and the needs of classroom teaching, etc.

- Teachers may provide appropriate supplementary notes/ explanations to enrich this resource in order to enhance students' understanding of the topic and information provided.

- In accordance with the curriculum rationale and aims, teachers may select other learning and teaching resources which are correct, reliable, objective and impartial to help students build up a solid knowledge base, develop positive values and attitudes as well as enhance critical thinking and problem solving skills, and various generic skills.

- If some information cannot be provided in this resource due to copyright issue, teachers may visit relevant websites provided.

- Some information may have been updated when being used by teachers, teachers may visit the corresponding websites to obtain the up-to-date information.

- Please also refer to the C&A Guide to understand the requirements and arrangements of the learning and teaching of the curriculum. Teachers are welcome to point out the areas need improvement, and welcome to provide updated information to enrich the content for all teachers' reference.

Notice and Disclaimer

- Some sources were not translated into English as the official English version is not available.

- In case of any discrepancy between the Chinese and English versions, the Chinese version shall prevail.