BC's Digital Literacy 9 Outline

"Using standards-based techniques, a collaborative teaching environment enriched through creative integration of technology tools takes learning beyond standardized tests and enables learning that embraces digital spaces, content, and resources and emphasizes that the process of learning is as important as an end product. An increasing focus on technology-enabled participatory learning also leverages the orientation of today's and tomorrow's students, for whom a digital environment is expected."

–*Digital Literacy, Libraries, and Public Policy,* Information Technology Policy's Digital Literacy Task Force, American Library Association, January 2013

Although suggested grade ranges have been included below for guidance, it is important to note that at the lower grade levels some of these ideas may be teacher modelled, with the gradual release of responsibility – either over the grades or depending on the level of expertise of the teacher and available equipment for the students.

Definition of Digital Literacy:

Digital Literacy is the interest, attitude and ability of individuals to use digital technology and communication tools appropriately to access, manage, integrate, analyze and evaluate information, construct new knowledge, and create and communicate with others.

1. Research and Information Literacy

Students apply digital tools to gather, evaluate, and use information.

a. Information Literacy

A digitally literate person uses the Internet to do research in an effective and responsible manner.

The student:
- understands that anyone can publish on the Web, so not all sites are equally trustworthy. (Gr. K-9)
- evaluates and selects information sources and digital tools based on the appropriateness to specific tasks. (Gr. 6-9)
- understands that to conduct effective and efficient online searches, he/she must use a variety of searching strategies. (Gr. 6-9)

b. Information Processing And Management

A digitally literate person uses technology to improve his/her ability to gather, organise, analyse and judge the relevance and purpose of digital information.

The student:
- compares, contrasts, and synthesizes information from diverse sources (triangulates information) before it is used in a knowledge-making process. (Gr. 6-9)
- gathers relevant digital information, e.g. other users' experiences, and assesses the quality of goods based on that information. (Gr. 6-9)

2. Critical Thinking, Problem Solving, and Decision Making Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

a. Specialized And Advanced Skills For Learning

A digitally literate person uses ICT to improve his/her learning performance.

The student:
- uses digital technology to identify and define authentic problems and significant questions for investigation. (Gr. 6-9)
- uses digital technology to plan and manage activities to develop a solution or complete a project. (Gr. 6-9)
- creates knowledge representations (e.g. mind maps, diagrams) using digital media. (Gr. 6-9)

3. Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

a. Specialized And Advanced Skills for Creative Expression

A digitally literate person uses ICT to express his/her creativity.

The student:
- uses a variety of digital media (text, images, audio, and movie) to express him/herself creatively. (Gr. K-9)
- uses digital models and simulations to explore complex systems and issues. (Gr. 6-9)
  - uses digital technology to identify trends and forecast possibilities. (Gr. 6-9)

4. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

a. Internet Safety

A digitally literate person stays safe on the Internet by employing strategies such as distinguishing between inappropriate contact and positive connections.

The student:
- acknowledges the benefits of online talk and messaging, but knows how to handle situations or online behavior which may make them feel uncomfortable. (Gr. 6-9)

b. Privacy And Security

A digitally literate person knows how to protect his/her privacy, respects the privacy of others, and employs strategies to maintain information and data security online.

The student:
- knows strategies for guarding against identity theft and scams that try to access his/her private information online. (Gr. 6-9)

c. Relationships And Communication

A digitally literate person understands the risks and benefits of developing online relationships and uses technology to communicate effectively and respectfully.

The student:

- is aware of the benefits of online communication and able to handle situations of online behaviour that may make him or her uncomfortable. (Gr. 6-9)

d. Cyberbullying

A digitally literate person recognizes cyberbullying and knows how to deal with it.

The student:

- distinguishes good-natured teasing from cyberbullying. (Gr. 6-9)
- understands the difference between being a passive bystander and an active intervener in cyberbullying situations. (Gr. 6-9)

e. Digital Footprint And Reputation
A digitally literate person is aware that his/her activities on the Internet leave a permanent "digital footprint" or "trail" and behaves accordingly.

The student:
- is aware that he/she has a digital footprint and that this information can be searched, copied, and passed on, and that he/she can take some control based on what he/she posts online. (6-9)
- understands the benefits of sharing information online and the potential risks of sharing inappropriate information. (Gr. 9-12)
- understands that everything they or anyone else posts about them online becomes part of a public online presence known as a digital footprint. (Gr. 9-12)
- understands his/her responsibility to protect the privacy of others when posting information about them online. (Gr. 9-12)

f. Self-image And Identity
A digitally literate person understands the nature of self-image and identity in the online environment, how our perceptions of others and our social values may be manipulated, and that people may not be what or whom they appear to be online.

The student:
- understands the social nature of digital media and technologies, and has basic vocabulary and knowledge for discussing the media landscape. (Gr. 6-9)
- is aware of his/her media habits and the array of media he/she uses on a weekly basis, and the role of digital media in his/her life. (Gr. 6-9)
- understands that presenting themselves in different ways online carries both benefits and risks. (Gr. 6-9)
- is aware of the gender stereotypes that exist in video games, virtual worlds and elsewhere on the Internet. (Gr. 6-9)

g. Creative Credit And Copyright
A digitally literate person respects other's ownership of their digital creations.

The student:
- understands copyright and licence rules, fair use, and the rights he/she has as a creator. (Gr. 6-9)

h. Legal And Ethical Aspects
A digitally literate person behaves appropriately and in a socially responsible way in digital environments, demonstrating awareness and knowledge of legal and ethical aspects on the use of ICT and digital content.

The student:

• considers legal and ethical principles of use and publication of information. (Gr. 6-9)

i. Balanced Attitude Towards Technology
A digitally literate person demonstrates an informed, open-minded, and balanced attitude towards information society and the use of digital technology, is curious, aware of opportunities and new developments, and is comfortable to explore and exploit them.

The student:
• exhibits a positive attitude toward using technology that supports collaboration, learning, and productivity. (Gr. 6-9)
• has a positive, but realistic attitude towards the benefits and risks associated with information technologies. (Gr. 6-9)
• assesses and reduces/avoids technology related threats to his/her health. (Gr. 6-9) • has a general level of confidence to experiment with new technologies, but also to reject inappropriate technologies. (Gr. 6-9)
• manages the potentially distracting aspects of working digitally. (Gr. 6-9)
• exhibits a positive attitude towards learning about emerging digital technologies. (Gr. 6-9)

j. Understanding And Awareness of the Role of ICT in Society
A digitally literate person understands the broader context of use and development of information and communication technology.

The student:
• understands the role of ICT in everyday life, in social life and at work. (Gr. 6-9)
• is aware of environmental issues related to the use of digital technologies. (Gr. 6-9)

5. Communication and Collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

a. Technology Mediated Communication And Collaboration
A digitally literate person connects, shares, communicates, and collaborates with others effectively in digital environments.

The student:

- interacts, collaborates, co-constructs content, and publishes with peers, experts, or others employing a variety of digital environments and media. (Gr. 6-9)
- communicates information and ideas effectively to multiple audiences using a variety of media and formats. (Gr. 6-9)
- contributes to project teams to produce original works or solve problems. (Gr. 6-9) • communicates through ICT (e.g. email, instant messaging, video conferencing). (Gr. 6- 9)

6. Technology Operations and Concepts
Students demonstrate a sound understanding of technology concepts, systems, and operations, and develop computational thinking skills.

a. General Knowledge And Functional Skills
A digitally literate person knows the basics (terminology, navigation, functionality) of digital devices and can use them for basic purposes.

The student:
- knows about the existence of various operating systems and understands the differences between them. (Gr. 6-9)
- possesses general computer skills (typing, using computers, launching a new program). (Gr. 6-9)
- can design, write and debug programs that accomplish specific goals, such as controlling or simulating physical systems. (Gr. 6-9)
- can solve programmatic problems by decomposing them into smaller parts. (Gr. 6-9)

b. Use in Everyday Life
A digitally literate person integrates technologies into the activities of everyday life.

The student:
- is able to download and access different information types from the Internet. (Gr. 6- 9)
- searches, collects, process, evaluates, shares, and stores data and information using various devices, applications, or cloud services. (Gr. 6-9)
- participates in society through online engagement in democratic actions (e.g. lobbying, petitions, parliament). (Gr. 6-9)

c. Informed Decision Making
A digitally literate person is aware of most relevant or common technologies and is able to decide upon the most appropriate technology according to the purpose or need at hand.

The student:
- selects and uses applications effectively and productively (e.g. chooses the most appropriate technologies according to the task). (Gr. 6-9)
- understands the potential of digital devices and resources for her/his schoolwork. (Gr. 6-9)
- knows the range of things that can be done using ICT/Internet. (Gr. 6-9)

d. Seamless Use Demonstrating Self-Efficacy
A digitally literate person confidently and creatively applies digital technologies to increase personal effectiveness and efficiency.

The student:
- arranges and develop his/her personal working environment as an effective and reliable system. (Gr. 6-9)
- uses different ICT in a way that helps to achieve certain results more quickly, or more easily, or to achieve better results. (Gr. 6-9)

e. Learning About And With Digital Technologies
A digitally literate person actively and constantly explores emerging technologies, integrates them in his/her environment and uses them for lifelong learning.

The student:
- uses ICT resources to safely expand his/her own knowledge and connect to the world. (Gr. 6-9)
- learns how to work with any new digital technology by trying it out, and using its internal guidance and help. (Gr. 6-9)
- adapts smoothly to new technology, and learns how to use them, and integrates them into his/her environment. (Gr. 6-9)
- self-monitors personal goals and diagnoses deficiencies of digital competence required for reaching these goals. (Gr. 6-9)

Sources:

ISTE-NETS For Students *Standards and Performance Indicators*
CommonSense Media's *K-12 Digital Literacy and Citizenship Curriculum*
European Commission's *Online Consultation on Experts' Views on Digital Competence*