



## PWSD ICT Skills Guide

This document is intended as a supplement to Manitoba Education's Literacy with ICT (LwICT) document, which is available here:

[http://www.edu.gov.mb.ca/k12/tech/lict/teachers/show\\_me/continuum.html](http://www.edu.gov.mb.ca/k12/tech/lict/teachers/show_me/continuum.html)

Digital citizenship skills are included in the LwICT [Health and Safety Guidelines](#) and [Ethics and Responsibilities Guidelines](#).

The PWSD ICT Skills guide provides suggested ICT skills for each grade range. The purpose of such guidelines is to help educators determine what skills are most relevant for their grade range and to help promote consistency across PWSD.

Please keep in mind that if students have not developed skills from a previous grade range, we may need to address those skills in addition to current grade level skills.

Although direct instruction may be required for students to develop ICT skills, these skills may or may not be taught as separate subject/course. ICT skills can be taught and developed as students complete learning activities as part of their regular daily work in any subject area. Each school will need to make decisions about how to best teach and reinforce these skills.

Due to the ever-changing nature of ICT, this guide will need to be updated regularly. Suggestions and feedback are welcome. Please submit your feedback using this form:

<https://goo.gl/forms/jkZAvo0Fo16bBpOv2>



**It is our goal that PWSD students will develop the following ICT skills in grades K-2.**

**By the end of grade 2, PWSD students will:**

- Identify and understand the general function of the: keyboard/keypad, mouse (if using a computer), monitor/screen, printer
- Turn on and turn off ICT devices correctly
- Log in and log off student accounts
- Recognize when a device has a low battery and charge ICT devices
- perform selection actions on tablet – tap, double tap, drag and drop and/or perform mouse actions on computer – click, double click, right-click, and drag
- Recognize the general purpose of a web browser
- Open a web browser and use links to move to a website
- Understand the use of a search engine, with support as needed
- Demonstrate responsible handling of ICT equipment
- Use technology to capture photos, audio and video
- Recognize and use letters and numbers on the keyboard or keypad
- Identify basic symbols used in digital communication (e.g., emojis, @ symbol).
- Interact with simple voice commands on devices (e.g., "play," "stop").
- Develop basic AI awareness by recognizing that computers can "talk" and "listen"
- Recognize the play, stop and pause icons when using technology



**It is our goal that PWSD students will develop the following ICT skills in grades 3-5.**

**By the end of grade 5, PWSD students will:**

- Name and save files in common applications
- Open and close files in common applications
- Maximize, minimize and close a window
- Use backspace, delete, enter, tab, shift and caps lock keys appropriately
- Use basic font formatting tools (font type, colour, size, bold, italics, underline)
- Use basic paragraph formatting tools (left, right or centered, bullets)
- Use a basic keyword search to find relevant websites
- Manually enter a URL in a web browser
- Create and delete files
- Create and delete folders
- Use folders to organize files
- Transfer files and folders to and from commonly used storage media (ie: cloud storage)
- Use cut, copy and paste functions
- Insert an image
- Demonstrate beginning keyboarding skills including using home row
- Keyboard at a rate of 15 Words Per Minute (WPM) with 90%+accuracy
- Use a presentation tool to create a presentation
- Use technology tools effectively to complete a task, convey a message or share ideas
- Undertake basic troubleshooting steps with ICT (ie: restart, check power source)
- Demonstrate coding skills by using a student-friendly coding tool to write basic programs
- Use accessibility tools such as voice typing and text to speech
- Begin to understand how AI is used in everyday applications (e.g., search engines, recommendation systems).



**It is our goal that PWSD students develop the following ICT skills in grades 6-8.**

**By the end of grade 8, PWSD students will:**

- Use keyboard shortcuts (such as CTRL+C to copy)
- Use spell check and grammar check
- Access and store files using cloud storage
- Rename files and folders
- Run multiple applications simultaneously and switch between applications
- Use paragraph formatting such as line spacing and indents
- Change page margins and page layout
- Use text wrap
- Create headers and footers, including page numbers
- Use a database/spreadsheet to manage data
- Insert rows and columns in a table or spreadsheet
- Create a graph using a spreadsheet
- Change row height and column width in a spreadsheet or table
- Use basic formulas in a spreadsheet (ie: SUM, AVERAGE)
- Add, delete and use websites saved in favourites
- Download and upload files
- Use email to send, forward and reply to messages, including attachments
- Correctly use email functions such as reply all, carbon copy (cc), blind carbon copy (bcc)
- Select a technology tool that is effective for a given task
- Embed links, video or audio in documents and presentations
- Identify the Uniform Resource Locator (URL) for a website or resource
- Make two or more attempts at troubleshooting an ICT issue independently (ie: restart, log in/log out, search online for possible solution)
- Keyboard at a rate of 25 Words Per Minute (WPM) with 90%+ accuracy
- Use digital tools to create and edit audio and video clips.
- Be exposed to age-appropriate AI tools for educational purposes
- Use collaborative online tools for group projects.
- Use page up/down, num lock and function keys appropriately



**It is our goal that PWSD students will develop the following ICT skills in grades 9-12.**

**By the end of grade 12, PWSD students will:**

- Recover accidentally deleted files
- Add, delete, copy and move cells, rows and columns in spreadsheets
- Add, delete, copy and move worksheets in spreadsheets
- Create and format tables
- Edit images
- Use templates or layouts to create specific products (ie: newsletter, brochure, report)
- Use advanced formatting features in word processors and presentation tools
- Use file sharing through cloud storage
- Create a website or blog
- Edit a website or blog
- Use curation tools to manage online sources (ie: bookmarks, social bookmarking, referencing tools)
- Identify secured and unsecured web pages
- Keyboard at a rate of 35 Words Per Minute (WPM) with 90%+ accuracy
- Use advanced search techniques and filters to find specific information online.
- Use AI tools for content creation and editing (e.g., grammar and style checkers with AI assistance).



It is our goal that PWSD students will develop the following ICT skills from the LwICT Model during their K-12 education:

### Healthy & Safety Guidelines from LwICT Model

[https://www.edu.gov.mb.ca/k12/tech/lict/teachers/show\\_me/continuum\\_health.html](https://www.edu.gov.mb.ca/k12/tech/lict/teachers/show_me/continuum_health.html)

### Health Guidelines

#### Physical Health:

- **recognizes possible health issues and takes measures to prevent injuries while using technology**  
*(e.g., considers ergonomic factors, screen time, physical inactivity, sleep habits, eye strain, distracted behaviour, repetitive stress injury)*

#### Social and Emotional Health:

- **establishes an appropriate balance between time spent alone using technology, time spent interacting with family and friends, and time spent on personal well-being**  
*(e.g., balances screen time with time for personal relationships, physical activity, nutritional needs)*
- **considers the potential impact on self and others when viewing or sharing digital content**  
*(e.g., considers the nature and purpose of photographs, videos, postings)*
- **seeks support for self and others when encountering conflict/bullying/abuse online**  
*(e.g., develops skills for conflict resolution, knows whom to talk to or where to find help)*
- **alerts the appropriate authorities regarding potential threats**

### Safety Guidelines

#### Managing Identity:

- **understands that personal information shared online is public and permanent, and has implications on how one is perceived by others**  
*(e.g., considers protection of own and others' identity when posting photos)*
- **shows respectful behaviour when interacting with others online**  
*(e.g., uses respectful behaviour and language, considers reputation of others)*



**Managing Privacy:**

- **considers privacy of self and others when sharing personal information online**  
*(e.g., is aware of the danger of identity theft)*
- **alerts the appropriate authorities regarding potential threats to privacy of self or others**
- **reads and considers the terms of service before joining online networks and downloading information**
- **considers the impact of sharing information**  
*(e.g., considers who will see the information, how will it be used, who will own it)*
- **protects personal information**  
*(e.g., applies security tools, privacy settings, password management)*

**Dangerous Behaviours:**

- **recognizes the implications of being distracted while using technology**  
*(e.g., recognizes the dangers of texting while driving, the implications of inattention when caring for children/others, the importance of attentiveness to surroundings)*
- **thinks critically when communicating with others online**  
*(e.g., assesses potential for cyber bullying, luring, threats to safety)*
- **recognizes the consequences of engaging in risky or illegal behaviours**  
*(e.g., understands the legal implications of sending explicit messages, accessing/distributing child pornography, luring)*
- **knows how and where to seek support when a risk is identified**



### Ethics & Responsibilities Guidelines from Manitoba Education's LwICT Model

[https://www.edu.gov.mb.ca/k12/tech/lict/teachers/show\\_me/continuum\\_ethics.html](https://www.edu.gov.mb.ca/k12/tech/lict/teachers/show_me/continuum_ethics.html)

- **respects privacy rights of self and others**  
*(e.g., does not share personal information about others without permission, uses consent forms, obtains permission to take photographs, sets appropriate privacy settings in social media, follows the school's/division's acceptable use policies, understands terms of service used by various social media)*
- **weighs society's right to information access against an individual's right to privacy**  
*(e.g., considers what would be appropriate/inappropriate to share about others, differentiates between what is essential and what is non-essential to know about others, acts ethically when sharing information about others, considers the purpose of the inquiry when gathering information)*
- **respects intellectual property rights of self and others** *(e.g., acknowledges authorship of all sources, respects terms of service agreements, applies copyright laws appropriately, understands and applies own and others' intellectual property rights)*
- **respects the rights of others to have their own perspectives**  
*(e.g., recognizes there are many points of view to consider, considers and tries to understand opinions/ideas of others)*
- **assesses the potential impact of decisions and actions on self, others, and society** *(e.g., considers the appropriateness and relevance of own questions, assesses and expresses findings objectively and constructively, considers the potential for infringement on privacy, thinks about environmental issues)*