

Information and Communication Technology Integration 7–9

Outcome Components

Students will demonstrate expected performance levels in five IT-based learning outcome areas within the context of essential graduation learnings and outcomes specified for the public school program as a whole.

Key-Stage Curriculum Outcomes

By the end of grade 9, in addition to the grade 6 outcomes, students will be expected to

BASIC OPERATIONS AND CONCEPTS (BOC)

- Concepts and skills associated with the safe, efficient operation of a range of information and communication technology.
- BOC 9.1 (relates to 6.1) operate a wide variety of school media, computer, and other educationally appropriate equipment for learning, communication, and the representation of their learning, independently and safely with teacher supervision
- BOC 9.2 (relates to 6.2) use and create information texts in a range of media, using specialized text features of those media to support the communication, with teacher assistance
- BOC 9.3 (relates to 6.3) demonstrate comfort with keyboarding and manipulation of computer input and peripheral devices as they work
- BOC 9.4 (relates to 6.4) manage their electronic files and correspondence efficiently
- BOC 9.5 (relates to 6.1, 6.2, 6.3, 6.4) from a range of resource options, knowledgeably select, manage, and use technological resources to solve curriculum problems and enhance their learning, with teacher guidance
- BOC 9.6 (relates to 6.6) understand and use a wide range of terminology related to the technology they use for learning
- BOC 9.7 (relates to 6.7) work safely as they use ICT, applying basic troubleshooting techniques to assess equipment and software problems that affect their use of ICT; then provide anecdotal information which may be of help to maintenance technicians

SOCIAL, ETHICAL, AND HUMAN ISSUES (SEHI)

- The understanding associated with the use of ITC, which encourages in students a commitment to pursue personal and social good, particularly to build and improve their learning environments and to foster stronger relationships with their peers and others who support their learning.
- SEHI 9.1 (relates to 6.1, 6.2, 6.3) demonstrate understanding of the nature of technology and its impacts on different societies and environments; using technology, in local and global contexts, with due regard for the legal and human rights of others

- SEHI 9.2 (relates to 6.3, 6.4, 6.5, 6.6) identify and demonstrate the values and techniques of mass media, popular culture, and electronic information environments, and evaluate the effects of these techniques
- SEHI 9.3 (relates to 6.7, 6.8) understand, model, and assume personal responsibility for the acceptable use of copyrighted and other information resources
- SEHI 9.4 (relates to 6.2, 6.7, 6.8) demonstrate an understanding of, and a commitment to, accuracy, ethical behaviour, and personal privacy and safety as they create and distribute information about themselves, others, and curriculum topics under study
- SEHI 9.5 (relates to 6.2, 6.7, 6.8) identify technology-related career opportunities of personal interest, and begin to assess their strengths and interests with respect to technology
- SEHI 9.6 (relates to 6.8) follow the Public School Program Network Access and Use Policy

PRODUCTIVITY (PTS)

- The efficient selection and use of ITC to perform tasks such as
 - the exploration of ideas
 - data collection
 - data manipulation, including the discovery of patterns and relationships
 - problem solving
 - the representation of learning
- PTS 9.1 (relates to 6.3) use software to brainstorm, develop a thought web, outline, and map ideas under study with independence
- PTS 9.2 (relates to 6.1, 6.2, 6.4, 6.5) explore curriculum concepts under study using specialized software; measuring, sampling and recording equipment; and computer-based simulations, with teacher assistance
- PTS 9.3 (relates to 6.1, 6.2, 6.4, 6.5, 6.7) explore the curriculum through a wide range of print and electronic forms; accessing and processing information by means of the specialized techniques associated with the technology they select
- PTS 9.4 (relates to 6.5, 6.6) create and manipulate sound, images and video, using digital equipment and computer-based editing, to represent their learning for particular audiences and purposes, independently
- PTS 9.5 (relates to 6.4, 6.5, 6.6) develop multimedia presentations, based on sound principles of design, with increasing confidence, efficiency and independence
- PTS 9.6 use information and communication technology to explore increasingly complex numerical and spatial situations for the purpose of developing and testing conjectures

COMMUNICATION (CT)

- Specific, interactive technology use supports student collaboration and sharing through communication.
- CT 9.1 (relates to 6.3, 6.5) use language, in a range of aural, print, media, and electronic forms to explore and express their perceptions, feelings, ideas and attitudes; refine their thinking; and interact, negotiate, and collaborate with others in order to build their understanding “
- CT 9.2 (relates to 6.1) design and build intranet or Internet websites of student-produced pages about a curriculum topic, in small groups with teacher supervision
- CT 9.3 (relates to 6.1–6.5) critically evaluate how style, form, source, and medium influence the accessibility, validity and meaning of information with independence

RESEARCH, PROBLEM SOLVING, AND DECISION MAKING (RPSD)

- Students' organization, reasoning, and evaluation of their learning rationalize their use of information and communication technology.

RPSD 9.1 (relates to 6.2) select appropriate measuring and recording devices and/or software to collect data, discover patterns of change over time, solve problems and make logical decisions based on their investigations; with teacher assistance

RPSD 9.2 (relates to 6.1, 6.2) create and use electronic charts, maps, tables, graphs, spreadsheets, and databases to collect, analyse and display data independently

RPSD 9.3 (relates to 6.1, 6.2) write and represent their research using the structures, features, conventions, and techniques of specialized publication and presentation formats with growing fluency

RPSD 9.4 (relates to 6.3, 6.4) assess the quality, comprehensiveness, biases, and perspectives of print, media and electronic resources for use in their curricular studies, with teacher guidance

RPSD 9.5 (relates to 6.1–6.4) critically evaluate how style, form, source, and medium influence the accessibility, validity, and meaning of information independently

RPSD 9.6 (relates to 6.3, 6.4) select and refine a research topic, according to teacher-provided criteria, to fulfill a curriculum requirement, with teacher assistance

RPSD 9.7 (relates to 6.1–6.4) assess the strengths and limitations of different approaches to research, then select those approaches which more efficiently meet their learning needs, with teacher assistance

RPSD 9.8 (relates to 6.1–6.4) experience comfort, security and clarity that well-researched solutions and conclusions are valid and reliable, though uncommon or unexpected

RPSD 9.9 (relates to 6.5) accurately and independently cite information sources