



# Learning

# Outcomes

# Framework

April 2004

*Grade 7*



**Learning Outcomes Framework**  
**Grade 7**



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# Introduction

The learning outcomes framework comprises a series of curriculum outcomes statements describing what knowledge, skills, and attitudes students are expected to demonstrate a result of their cumulative learning experiences in the primary–graduation continuum. Through an ongoing process, the Department of Education is developing a learning outcomes framework for each area of the public school program.

This document provides an overview of the learning outcomes framework organized by grade level and subject area. It is intended to serve as a brief survey of expected learning outcomes and as a tool to assist teachers in program planning. The connections among learning outcomes reflect natural affinities among subject areas and facilitate the design of a balanced, integrated program.

In designing appropriate learning experiences that enable students to achieve the expected learning outcomes, teachers and administrators are expected to refer to foundation documents and related curriculum guides listed in *Public School Programs*. In planning the appropriate use of information technologies as tools for learning and teaching, teachers and administrators should also refer to *Vision for the Integration of Information Technologies within the Nova Scotia Public School System*. It is available on-line at <lr.EDnet.ns.ca>.

Foundation documents provide the framework for general and key-stage curriculum outcomes, outline the focus and key features of the curriculum, and describe contexts for learning and teaching. Curriculum guides elaborate on specific curriculum outcomes and describe other aspects of curriculum, such as program design and components, instructional and assessment strategies, and resources.

General curriculum outcomes are statements that identify what students are expected to know and be able to do upon completion of study in a curriculum area. Key-stage curriculum outcomes are statements that identify what students are expected to know and be able to do by the end of grades 3, 6, 9, and 12 as a result of their cumulative learning experiences in a curriculum area. Specific curriculum outcomes are statements that identify what students are expected to know and be able to do at a particular grade level.

The following overview of the learning outcomes framework notes general curriculum outcomes and specific curriculum outcomes. For some subject areas, key-stage curriculum outcomes statements are also included. It should be noted that specific curriculum outcomes for music, family studies, and visual arts are not yet available and that specific curriculum outcomes noted for Health/Personal Development and Relationships 7, Social Studies 7, and Technology Education 7 are **draft** statements. While implementation of new curriculum in these subjects is not yet required, teachers may wish to consider these draft statements and the key-stage curriculum outcomes in planning their instructional programs.

## Junior High Program Components

Each school board is required to provide, in grades 7 to 9 inclusive, in each school under its jurisdiction, instruction in the prescribed courses in English language arts; French, Gaelic, or Mi'kmaw; mathematics; personal development and relationships; physical education; science; social studies; and **two** of arts education, family studies, or technology education. Students in grades 7–9 are expected to take at least **one** of the following electives: Art, Family Studies, Music, or Technology Education. It is expected that information technologies will be integrated within the prescribed courses; the junior high program does not include discrete computer-related studies. Each school is also required to provide programming and services for students with special needs.

## Exploratory Options

Exploratory options (sometimes called mini-courses) may be provided to extend the curriculum and provide enrichment opportunities for young adolescents. Exploratory options may be designed as a component of compulsory or elective courses but may not replace program requirements noted above.

Exploratory options should contribute to the students' achievement of specific curriculum outcomes in one or more subject areas and should reflect the developmental needs of the young adolescent.

Exploratories may be offered for short periods of time during the year.

# Core French

## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will be expected to*

## Specific Curriculum Outcomes

*Students will be expected to*

### Communication

GCO: On the basis of their experiences in the Core French Program, students will be expected to

- communicate effectively in French, both orally and in writing
- interact appropriately in a variety of situations that relate to their needs and interests

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|---|--|
| <ul style="list-style-type: none"> <li>• function in a classroom where French is the language spoken</li> </ul>       | <ul style="list-style-type: none"> <li>• listen to longer communications (demonstrate with frequent support)</li> <li>• follow more complex directions (demonstrate with frequent support)</li> <li>• negotiate to understand (demonstrate with frequent support)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• participate in an informal conversation, with support</li> </ul>             | <ul style="list-style-type: none"> <li>• ask for and give information (demonstrate with occasional support)</li> <li>• initiate and conclude a conversation (demonstrate with occasional support)</li> <li>• communicate on the telephone (demonstrate with occasional support)</li> </ul>   |
| <ul style="list-style-type: none"> <li>• identify, describe and compare objects, people, events and places</li> </ul> | <ul style="list-style-type: none"> <li>• recount an event (demonstrate with occasional support)</li> <li>• give a report (demonstrate with occasional support)</li> <li>• describe physical and personality traits (demonstrate with occasional support)</li> <li>• give directions (demonstrate with occasional support)</li> </ul> |
| <ul style="list-style-type: none"> <li>• express a preference, an opinion or a feeling with justification</li> </ul>  | <ul style="list-style-type: none"> <li>• discuss tastes (demonstrate with occasional support)</li> <li>• state preferences (demonstrate with occasional support)</li> <li>• justify choices (demonstrate with occasional support)</li> <li>• persuade (demonstrate with frequent support)</li> </ul>                                 |
| <ul style="list-style-type: none"> <li>• become involved in a variety of interactive activities</li> </ul>            | <ul style="list-style-type: none"> <li>• make telephone calls and participate in interviews (demonstrate with occasional support)</li> <li>• participate in a debate, games, round table discussions, brainstorming, surveys, and role-plays (demonstrate with occasional support)</li> </ul>  |
| <ul style="list-style-type: none"> <li>• ask a variety of questions</li> </ul>  | <ul style="list-style-type: none"> <li>• find information (demonstrate with occasional support)</li> <li>• clarify and verify learning (demonstrate with frequent support)</li> <li>• select pertinent information (demonstrate with occasional support)</li> </ul>  |

## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will be expected to*

- select information by reading, listening to, or viewing different texts
- respond personally to a variety of texts
- produce a variety of texts by following criteria

## Specific Curriculum Outcomes

*Students will be expected to*

- distinguish the characteristics of different types of text (demonstrate with occasional support)
- identify the main ideas of a text (demonstrate with occasional support)
- infer the evolution, the conclusion of a story (demonstrate with occasional support)
- draw, mime, and dramatize (demonstrate with occasional support)
- plan, organize and evaluate a portfolio (demonstrate with occasional support)
- compose songs and poetry (demonstrate with occasional support)
- keep a personal journal (demonstrate with occasional support)
- produce expressive, informative, persuasive, humorous, and poetic texts (demonstrate with occasional support)
- revise and correct text (demonstrate with occasional support)

## Culture

GCO: On the basis of their experiences in the Core French Program, students will be expected to

- demonstrate an appreciation and understanding of Francophone cultures, while comparing them with their own culture, as well as an appreciation and understanding of Canada's multicultural reality

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| <ul style="list-style-type: none"> <li>• describe certain Francophone regions locally, provincially, nationally, and internationally</li> <li>• describe, with relevant details, certain realities of Francophone cultures</li> </ul> | <ul style="list-style-type: none"> <li>• name and locate certain Francophone communities in Canada (demonstrate with occasional support)</li> <li>• identify and describe the different Acadian regions in Nova Scotia (demonstrate with occasional support)</li> <li>• identify certain areas in the world where French is spoken (demonstrate with occasional support)</li> <li>• describe Acadian festivals and the important role of music and dance (demonstrate with occasional support)</li> <li>• describe some Acadian meals (demonstrate with occasional support)</li> <li>• identify some Francophone festivals in Canada (demonstrate with occasional support)</li> <li>• identify some Francophone customs in Canada (demonstrate with frequent support)</li> <li>• name some events associated with Francophone regions in the world (demonstrate with frequent support)</li> </ul> |
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## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will be expected to*

- compare aspects of Francophone cultures with aspects of their own culture
- explain the contribution of some contemporary Francophone personalities to Canadian society
- identify the diverse origins of people who make up the Canadian mosaic
- identify the cultural elements in authentic documents
- in the advantages of being bilingual in our society

## Specific Curriculum Outcomes

*Students will be expected to*

- compare Acadian culture and their own culture (demonstrate with occasional support)
- inform themselves about the contributions to Canada of some famous Francophones (demonstrate with frequent support)
- describe some contributions of famous Acadians (demonstrate with occasional support)
- recognize certain cultural stereotypes (demonstrate with occasional support)
- express an opinion with respect to some stereotypes (demonstrate with frequent support)
- demonstrate a respect towards other languages (demonstrate with occasional support)
- inform themselves of activities through the media (demonstrate with frequent support)
- inform and entertain themselves by listening to the radio and viewing televisions and films (demonstrate with frequent support)
- demonstrate an interest in using French (demonstrate with occasional support)
- identify the evidence of bilingualism in our society (careers, laws, etc.) (demonstrate with occasional support)

## General Language Education

GCO: On the basis of their experience in the Core French Program, students will be expected to

- choose and implement strategies to facilitate their communication in French and their learning
- use learning strategies, communication strategies and social strategies to communicate in French, both orally and in writing
- demonstrate the importance of non-verbal communication (use gestures) (demonstrate with occasional support)
- use partial sentences, repetition, paraphrase, and circumlocutions (demonstrate with occasional support)
- request clarifications and explanations in order to understand (demonstrate with occasional support)
- plan and organize their productions using their own learning experiences
  - prepare a checklist
  - adapt a message to the circumstances
  - plan a written production (demonstrate with frequent support)

## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will be expected to*

## Specific Curriculum Outcomes

*Students will be expected to*

- self-correct (demonstrate with occasional support)
- keep a personal journal (demonstrate with frequent support)
- give advice to facilitate group work (demonstrate with occasional support)
- take turns (demonstrate with occasional support)
- accept suggestions given by others (demonstrate with occasional support)
- identify how knowledge and skills in French class can be useful in everyday life (demonstrate with frequent support)

## Language

GCO: On the basis of their experience in the Core French Program, students will be expected to

- recognize and use in context elements of the linguistic code, orally and in writing, to facilitate their communication in French
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| <ul style="list-style-type: none"> <li>• understand and use the vocabulary, expressions and structures relating to the needs in the classroom and to areas of experience</li> </ul> | <ul style="list-style-type: none"> <li>• function in the classroom by using expressions from the unit «<i>comment survivre en français dans un cours de français</i>» and the directions and rules of the classroom (demonstrate with occasional support)</li> <li>• participate in a conversation and involve themselves in a variety of interactions by using the present, future, and simple past tenses; connecting words such as <i>d'abord, ensuite, finalement, puis, et, mais</i>; interrogative and negative (demonstrate with occasional support)</li> <li>• describe and compare by using the present, future, and simple past tenses; adjectives; adverbs; comparative and superlative; connecting words (demonstrate with frequent support)</li> <li>• select information using verb tenses, connecting words such as <i>d'abord, ensuite, finalement, puis, cependant, en plus, par contre</i> (demonstrate with occasional support)</li> <li>• produce a variety of texts using the present, future, and past tenses; interrogative and negative; connecting words such as <i>puis, et, mais, en plus</i> to produce a cohesive and coherent text (demonstrate with occasional support)</li> </ul> |
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# English Language Arts

## General Curriculum Outcomes    Specific Curriculum Outcomes

GCO 1: Students will be expected to speak and listen to explore, extend, clarify, and reflect on their thoughts, ideas, feelings, and experiences.

GCO 2: Students will be expected to communicate information and ideas effectively and clearly, and to respond personally and critically.

GCO 3: Students will be expected to interact with sensitivity and respect, considering the situation, audience, and purpose.

*Students will be expected to*

- 1.1 recognize that contributions from many participants are needed to generate and sustain discussions
  - 1.2 know how and when to ask questions that call for elaboration and clarification; give appropriate responses when asked for the same information
  - 1.3 express clearly and with conviction, a personal point of view, and be able to support that position
  - 1.4 listen attentively to grasp the essential elements of a message, and recognize and consider supporting details
- 2.1 participate in small-group conversation and whole-class discussion recognizing that there are a range of strategies that contribute to effective talk
  - 2.2 recognize that different purposes and audiences influence communication choices such as vocabulary, sentence structure, rate of speech, and tone during talk; consider appropriate communication choices in various speaking contexts
  - 2.3 follow instructions and respond to questions and directions
  - 2.4 evaluate speakers and the effectiveness of their talk in particular contexts; identify the verbal and non-verbal language cues used by speakers (e.g., repetition, volume, and eye contact)
- 3.1 demonstrate active speaking and listening skills such as making eye contact, rephrasing when appropriate, clarifying comments, extending, refining, and/or summarizing points already made
  - 3.2 demonstrate a respect for others by developing effective ways to express personal opinions such that they reflect sensitivity to others, including differences in culture and language
  - 3.3 recognize that spoken language reveals values and attitudes such as bias, beliefs, and prejudice; understand how language is used to influence and manipulate
  - 3.4 recognize that different situations (interviews, speeches, debates, conversation) require different speaking and listening conventions (questioning techniques, persuasive talk, formal language) appropriate to the situation

**General Curriculum Outcomes    Specific Curriculum Outcomes**

	<i>Students will be expected to</i>
GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.	<ul style="list-style-type: none"><li>4.1 select texts that address their learning needs and range of special interests</li><li>4.2 read widely and experience a variety of young adult fiction and literature from different provinces and countries</li><li>4.3 demonstrate an awareness of how authors use pictorial, typographical, and organizational devices such as photos, titles, headings, and bold print to achieve certain purposes in their writing, and use those devices more regularly to construct meaning and enhance understanding</li><li>4.4 develop some independence in recognizing and using various reading and viewing strategies (predicting, questioning, etc.) and in using cueing systems (graphophonic, contextual, syntactic, etc.) to construct meaning; apply and develop these strategies and systems while reading and viewing increasingly complex print and media texts</li><li>4.5 talk and write about the various processes and strategies readers and viewers apply when constructing meaning from various texts; recognize and articulate personal processes and strategies used when reading or viewing various texts</li></ul>
GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.	<ul style="list-style-type: none"><li>5.1 identify and articulate personal needs and personal learning needs with growing clarity and some independence</li><li>5.2 become increasingly aware of and use periodically the many print and non-print avenues and sources (Internet, documentaries, interviews) through which information can be accessed and selected</li><li>5.3 use research strategies like issue mapping and webbing to guide research</li></ul>
GCO 6: Students will be expected to respond personally to a range of texts.	<ul style="list-style-type: none"><li>6.1 extend personal responses, either orally or in writing, to print and non-print texts by explaining in some detail initial or basic reactions to those texts</li><li>6.2 make evaluations or judgments about texts and express personal points of view</li><li>6.3 find evidence and examples in texts to support personal views about themes, issues, and situations</li></ul>
GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.	<ul style="list-style-type: none"><li>7.1 recognize that print and media texts can be biased and become aware of some of the ways that information is organized and structured to suit a particular point of view</li></ul>

## General Curriculum Outcomes    Specific Curriculum Outcomes

*Students will be expected to*

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| <p>GCO 8: Students will be expected to use writing and other ways of representing to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imagination.</p> | <p>7.2 recognize that print and media texts are constructed for particular readers and purposes; begin to identify the textual elements used by authors</p> <p>7.3 develop an ability to respond critically to various texts in a variety of ways such as identifying, describing, and discussing the form, structure, and content of texts and how they might contribute to meaning construction and understanding</p> <ul style="list-style-type: none"> <li>– recognize that personal knowledge, ideas, values, perceptions, and points of view influence how writers create texts</li> <li>– become aware of how and when personal background influences meaning construction, understanding, and textual response</li> <li>– recognize that there are values inherent in a text, and begin to identify those values</li> <li>– explore how various cultures and realities are portrayed in media texts</li> </ul> <p>8.1 experiment with a range of strategies (brainstorming, sketching, freewriting) to extend and explore learning, to reflect on their own and others' ideas, and to identify problems and consider solutions</p> <p>8.2 become aware of and describe the writing strategies that help them learn; express an understanding of their personal growth as language learners and language users</p> <p>8.3 understand that note-making is purposeful and has many purposes (e.g., personal use, gathering information for an assignment, recording what has happened and what others have said) and many forms, (e.g., lists, summaries, observations, and descriptions)</p> <p>8.4 demonstrate an ability to integrate interesting effects in imaginative writing and other forms of representation</p> <ul style="list-style-type: none"> <li>– consider thoughts and feelings in addition to external descriptions and activities</li> <li>– integrate detail that adds richness and density</li> <li>– identify and correct inconsistencies and avoid extraneous detail</li> <li>– make effective language choices relevant to style and purpose</li> <li>– select more elaborate and sophisticated vocabulary and phrasing</li> </ul> |
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## General Curriculum Outcomes      Specific Curriculum Outcomes

GCO 9: Students will be expected to create texts collaboratively and independently, using a variety of forms for a range of audiences and purposes.

*Students will be expected to*

- 9.1 produce a range of writing forms, for example, stories, cartoons, journals, business and personal letters, speeches, reports, interviews, messages, poems, and advertisements
- 9.2 recognize that a writer's choice of form is influenced by both the writing purpose (to entertain, inform, request, record, describe) and the reader for whom the text is intended (e.g., understand how and why a note to a friend differs from a letter requesting information)
- 9.3 demonstrate an understanding that ideas can be represented in more than one way and experiment with using other forms such as dialogue, posters, and advertisements
- 9.4 develop the awareness that content, writing style, tone of voice, language choice, and text organization need to fit the reader and suit the reason for writing
- 9.5 ask for reader feedback while writing and use this feedback when shaping subsequent drafts; consider self-generated drafts from a reader's/viewer's/listener's point of view

GCO 10: Students will be expected to use a range of strategies to develop effective writing and other ways of representing and to enhance their clarity, precision, and effectiveness.

- 10.1 understand and use conventions for spelling familiar words correctly; rely on knowledge of spelling conventions to attempt difficult words; check for correctness; demonstrate control over most punctuation and standard grammatical structures in writing most of the time; use a variety of sentence patterns, vocabulary, and paragraph structures to aid effective written communication
- 10.2 recognize and begin to use more often the specific prewriting, drafting, revising, editing, proofreading, and presentation strategies that most effectively help to produce various texts
- 10.3 acquire some exposure to the various technologies used for communicating to a variety of audiences for a range of purposes (videos, e-mail, word processing, audiotapes)
- 10.4 demonstrate a commitment to crafting pieces of writing and other representations
- 10.5 collect information from several sources (interviews, film, CD-ROMs, texts) and combine ideas in communication

# Health/Personal Development and Relationships (Draft)

## General Curriculum Outcomes    Specific Curriculum Outcomes

*Students will be expected to*

### The Body: Growth and Development

GCO A: Students will be expected to demonstrate knowledge of the body, body functions, and growth and development.

- A1.1 demonstrate an understanding of how the body systems work together to digest and metabolize food
- A1.2 demonstrate an understanding of ways in which the body protects itself from infection and disease
- A2.1 identify physical, emotional, and social changes that occur through the stages of childhood

### Strategies for Healthy Living

GCO B: Students will be expected to demonstrate knowledge, skills, and attitudes that contribute to active, healthy living.

- B1.1 identify an understanding of how eating habits and lifestyle affect the digestion and metabolism of food
- B1.2 identify factors that affect body weight
- B2.1 identify factors that support the practice of healthy eating habits throughout the lifecycle
- B2.2 acknowledge the need to respect different body sizes and shapes
- B3.1 identify positive and negative reasons for taking risks
- B3.2 explain the relationship between risk taking and self-image
- B3.3 assess their own risk-taking tendency in a variety of contexts
- B3.4 identify and practise strategies for making decisions that involve risk
- B3.5 describe the effects of tobacco, alcohol, cannabis, and LSD on the body systems
- B3.6 identify factors that influence the risk level of drug use
- B3.7 identify personal, social, and cultural influences related to drug use
- B4.1 identify and practise ways of contributing to the physical and emotional safety of the school community
- B4.2 demonstrate the ability to set and maintain personal limits in a variety of decision-making situations involving peers
- B4.3 identify and practise assertive ways of refusing a ride with a driver who is under the influence of alcohol or other intoxicants

**General Curriculum Outcomes    Specific Curriculum Outcomes**

*Students will be expected to*

- B4.4 identify types of abuse and demonstrate knowledge of laws related to assault and abuse
- B4.5 identify and practise safety precautions related to competitive and non-competitive sports
  
- B5.1 identify and practise strategies for preventing the spread of pathogens
  
- B6.1 identify and practise healthy ways of expressing emotions
- B6.2 demonstrate an awareness of ways emotions, thoughts, and body affect one another
- B6.3 identify and practise strategies for dealing assertively with conflict
  
- B7.1 participate in a broad range of physical activities they enjoy
- B7.2 identify and overcome gender stereotypes related to physical activity

**Values and Practices for Healthy Living**

GCO C: Students will be expected to demonstrate knowledge of factors that contribute to healthy living values and practices.

- C1.1 demonstrate an understanding of how different cultures view the role of adolescents within the family
- C1.2 demonstrate an awareness of their changing role within their own families
  
- C2.1 define community and demonstrate an understanding of how communities function as well as an appreciation of their own community
  
- C3.1 demonstrate an awareness of changing attitudes toward adolescents
- C3.2 demonstrate an awareness of adolescents as a target population for consumer marketing
- C3.3 demonstrate an awareness of gender-based trends and issues in the workplace
  
- C4.1 assess the impact of various decisions and practices on the health of the local and regional environments
  
- C5.1 demonstrate acceptance of, and appreciation for, their own and others' cultural backgrounds

## General Curriculum Outcomes    Specific Curriculum Outcomes

*Students will be expected to*

### Strategies for Positive Personal Development and Healthy Relationship

GCO D: Students will be expected to demonstrate the knowledge, skills, and attitudes necessary to live happily and productively as an individual, within a family, and within the community.

- D1.1 identify and practise strategies for managing stress and solving problems associated with the changes and challenges of adolescence
- D1.2 demonstrate an understanding of the relationship between body image and self-esteem
- D1.3 demonstrate an ability to set short- and medium-term goals and to apply strategies for achieving these goals
- D1.4 identify and practise effective work and study habits
  
- D2.1 identify and practise ways of supporting healthy self-concept and decision making among peers
- D2.2 identify ways that community services provide protection from violence and abuse
  
- D3.1 demonstrate respect for the feelings and beliefs of others
- D3.2 identify the roles, rights, and responsibilities involved in various relationships
- D3.3 demonstrate the ability to communicate and work effectively in a group
- D3.4 identify and practise strategies for dealing with change in peer relationships
  
- D4.1 locate and analyse financial information related to various life/work options
  
- D5.1 define and compare the terms job, occupation, work, life/work, lifestyle, and career
- D5.2 demonstrate an understanding of the role of a realistic and positive self-concept in life/work building
- D5.3 identify various types of work, both paid and unpaid as well as volunteerism
- D5.4 project future wants and needs and identify ways that they can be satisfied through a combination of work, community, social, and family roles
- D5.5 demonstrate an understanding of family influences on life/work interests and decision making
- D5.6 select items for and maintain a life/work portfolio
- D5.7 identify relationships between their strengths/skills/interests and their career and educational plans

# Information Technologies

## 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.*

### Basic Operations and Concepts (BOC)

- concepts and skills associated with the safe, efficient operation of a range of information technologies

## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will have achieved the outcomes for grades primary–6 and will also be expected to*

- BOC 9.1 under general supervision as they research, design, and create products that represent their learning, independently and safely
  - operate a wide variety of school media equipment, including audio equipment, overhead projectors, video cameras, videocassette recorder/players, televisions, photocopiers, and still cameras
  - use computer equipment to access and use curriculum-based computer software, from CD-ROMs, hard drives, or other data storage media
- BOC 9.2 demonstrate accurate, efficient keyboarding and manipulation of appropriate input devices; be able to assist others in the use of peripherals
- BOC 9.3 using a variety of technologies, demonstrate an understanding of technological applications and apply appropriate technologies to solve curriculum problems and enhance their learning
- BOC 9.4 independently run grade-appropriate software and manage folders and directories of their electronic work in accordance with school policies
- BOC 9.5 understand and use an increasing range of specialized vocabulary associated with the technologies they use
- BOC 9.6 practise and demonstrate a developing understanding of sound ergonomics as they use IT; identify and report dangerous workstation configurations or practices
- BOC 9.7 apply basic troubleshooting techniques in assessing equipment and software problems that affect their use of IT; document and articulate such problems to assist technical support staff in further diagnosis

## 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.*

### Productivity Tools and Software (PTS)

- the efficient selection and use of IT to perform tasks such as the exploration of ideas
  - data collection
  - data manipulation, including the discovery of patterns and relationships
  - problem solving
  - the communication of learning

## Key-Stage Curriculum Outcomes

*By the end of grade 9, students will have achieved the outcomes for grades primary–6 and will also be expected to*

- PTS 9.1 independently use electronic planning software to brainstorm; develop a thought web; outline and map ideas under study; and track their progress toward agreed work deadlines
- PTS 9.2 in the process of collecting, analysing, and displaying data, independently create electronic charts, tables, and graphs; and design, create, and manipulate spreadsheets and databases
- PTS 9.3 with the assistance of their teachers, explore curriculum concepts under study using specialized software; peripheral measuring, sampling, and recording equipment; and computer-based simulations
- PTS 9.4 explore the curriculum through a wide range of print and electronic forms; access, create, and process information by means of the specialized techniques associated with the technologies they select
- PTS 9.5 under the general supervision of their teachers, independently manipulate sound and a range of image types, using digital imaging equipment and computer-based editing, to represent their learning in a variety of ways and for particular audiences
- PTS 9.6 independently develop multimedia presentations, based on sound principles of design, with increasing confidence and efficiency
- PTS 9.7 use information technology to explore increasingly complex numerical and geometric situations for the purpose of developing conjectures

### Communications Technology (CT)

- the use of specific, interactive technologies that support collaboration and sharing through communication

- CT 9.1 represent their learning in a range of media, including print, video, audio, and multimedia, with growing confidence and competence
- CT 9.2 with teacher supervision, locate and access curriculum-relevant books, journals, and other print documents; media resources; and electronic files for use in all types of research
- CT 9.3 manage their electronic files and correspondence efficiently

## 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, students will have achieved the outcomes for grades primary–6 and will also be expected to*

- CT 9.4 demonstrate their understanding of how form, standards, conventions, and methods of transmission affect their use of information and its impact on themselves and others
- CT 9.5 with teacher supervision, work collaboratively in small groups to design and build, for peer use, intranet or Internet websites of student-produced pages about a curriculum topic

### Research, Problem Solving, and Decision Making (RPSD)

- the organization, reasoning, and evaluation by which students rationalize their use of IT in pursuit of other curriculum outcomes
- RPSD 9.1 with the assistance of their teachers, 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
- RPSD 9.2 with the assistance of their teachers, select and use appropriate forms, styles, media, and sources to access, manipulate, assess, and present information meaningfully for different audiences
- RPSD 9.3 with the assistance of their teachers, assess the quality, completeness, biases, and perspectives of print, media, and electronic resources for possible use in their curricular studies
- RPSD 9.4 independently select, use, and occasionally develop specialized techniques to create communication environments, processes, and products in print, media, and electronic forms that meet defined information needs and appropriate quality standards
- RPSD 9.5 independently and critically evaluate how style, form, source, and medium influence the accessibility, validity, and meaning of information
- RPSD 9.6 with the assistance of their teachers, access the strengths and limitations of different approaches to research, then select those approaches that more efficiently meet their learning needs
- RPSD 9.7 with the assistance of their teachers, select and refine a research a topic, according to teacher-provided criteria, to fulfill a curriculum requirement
- RPSD 9.8 accurately and independently cite bibliographic information

## 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, students will have achieved the outcomes for grades primary–6 and will also be expected to*

### Social, Ethical, and Human Issues (SEHI)

- understanding associated with the use of IT that 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 demonstrate understanding of the nature of technology and its impacts on different societies and environments; assume personal responsibility for ethical behaviour and attitudes with regard to information technologies and resources and use them—in local and global contexts—with due regard for the legal and human rights of others
  - SEHI 9.2 demonstrate understanding of, model, and assume personal responsibility for the acceptable use of copyrighted information resources
  - SEHI 9.3 identify and demonstrate the techniques of mass media, popular culture, and electronic information environments, and evaluate the effects of these techniques
  - SEHI 9.4 identify the values that inform mass media, popular culture, and electronic information environments in relation to their personal values
  - SEHI 9.5 with the assistance of their teachers as required, identify the impacts of various media and information technologies on them, their learning environment, their cultures, and society
  - SEHI 9.6 as researchers, demonstrate an understanding of and a commitment to accuracy and ethical behaviour as they create and distribute information about themselves, others, and curriculum topics under study
  - SEHI 9.7 identify technology-related career opportunities of personal interest, and begin to assess their strengths and interests with respect to technology

# Mathematics

## General Curriculum Outcomes      Specific Curriculum Outcomes

GCO A: Students will demonstrate number sense and apply number-theory concepts.

*Students will be expected to*

- A1 model and use power, base, and exponent to represent repeated multiplication
- A2 rename numbers among exponential, standard and expanded forms
- A3 rewrite large numbers from standard form to scientific notation and vice versa
- A4 solve and create problems involving common factors and greatest common factors (GCF)
- A5 solve and create problems involving common multiples and least common multiples (LCM)
- A6 develop and apply divisibility rules for 3, 4, 6, and 9
- A7 apply patterning in renaming numbers from fractions and mixed numbers to decimal numbers
- A8 rename single-digit and double-digit repeating decimals to fractions through the use of patterns, and use these patterns to make predictions
- A9 compare and order proper and improper fractions, mixed numbers, and decimal numbers
- A10 illustrate, explain, and express ratios, fractions, decimals, and percents in alternative forms
- A11 demonstrate number sense for percent
- A12 represent integers (including zero) concretely, pictorially, and symbolically, using a variety of models
- A13 compare and order integers

GCO B: Students will demonstrate operation sense and apply operation principles and procedures in both numeric and algebraic situations.

- B1 use estimation strategies to assess and justify the reasonableness of calculation results for integers and decimal numbers
- B2 use mental math strategies for calculations involving integers and decimal numbers
- B3 demonstrate understanding of the properties of operations with decimal numbers and integers
- B4 determine and use the most appropriate computational method in problem situations involving whole numbers and/or decimals
- B5 apply the order of operations for problems involving whole and decimal numbers
- B6 estimate sum or difference of fractions when appropriate
- B7 multiply mentally a fraction by whole numbers and vice versa
- B8 estimate and determine percent when given the part and the whole
- B9 estimate and determine the percent of a number



**General Curriculum Outcomes    Specific Curriculum Outcomes**

*Students will be expected to*

GCO E: Students will demonstrate spatial sense and apply geometric concepts, properties, and relationships.

- D4    construct and analyse graphs of rates to show how change in one quantity affects a related quantity
- D5    demonstrate an understanding of the relationships among diameter, radii, and circumference of circles, and use the relationships to solve problems
- E1    decide and justify which combinations of triangle classifications are possible, through construction using materials and/or technology
- E2    determine and use relationships between angle measures and side lengths in triangles
- E3    construct angle bisectors and perpendicular bisectors, using a variety of methods
- E4    apply angle pair relationships to find missing angle measures
- E5    identify, construct, classify, and use angle pair relationships pertaining to parallel lines and non-parallel lines and their transversals
- E6    apply angle relationships to find angle measures
- E7    explain, using a model, why the sum of the measures of the angles of a triangle is  $180^\circ$
- E8    sketch and build 3-D objects, using a variety of materials and information about the objects
- E9    draw, describe, and apply translations, reflections, and rotations, and their combinations, and identify and use the properties associated with these transformations
- E10    create and describe designs using translation, rotation, and reflection

GCO F: Students will solve problems involving the collection, display, and analysis of data.

- F1    communicate through example the distinction between biased and unbiased sampling, and first- and second-hand data
- F2    formulate questions for investigation from relevant contexts
- F3    select, defend, and use appropriate data collection methods and evaluate issues to be considered when collecting data
- F4    construct a histogram
- F5    construct appropriate data displays, grouping data where appropriate and taking into consideration the nature of the data
- F6    read and make inferences for grouped and ungrouped data displays
- F7    formulate statistics projects to explore current issues from within mathematics, other subject areas, or the world of students

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**General Curriculum Outcomes    Specific Curriculum Outcomes**

*Students will be expected to*

- |  |   |
|--|---|
| GCO G: Students will represent and solve problems involving uncertainty. | F8    determine measures of central tendency and how they are affected by data presentations and fluctuations                                     |
|  | F9    draw inferences and make predictions based on the variability of data sets, using range and the examination of outliers, gaps, and clusters |
|  | G1    identify situations for which the probability would be near 0, $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ and 1                          |
|  | G2    solve probability problems, using simulations and by conducting experiments   |
|  | G3    identify all possible outcomes of two independent events, using tree diagrams and area models   |
|  | G4    create and solve problems, using the numerical definition of probability  |
|  | G5    compare experimental results with theoretical results   |
|  | G6    use fractions, decimals, and percents as numerical expressions to describe probability  |

# Music

## General Curriculum Outcomes    Key-Stage Curriculum Outcomes

**Note:** Specific curriculum outcomes have not yet been developed for Music 7–9. Teachers may wish to use the following General Curriculum Outcomes and Key-Stage Curriculum Outcomes from *Foundation for the Atlantic Canada Arts Education Curriculum* in planning their music program.

*By the end of grade 9, students will have achieved the outcomes for entry–grade 6 and will also be expected to*

### Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas using the skills, language, techniques, and processes of the arts.

- sing or play, maintaining a part within a variety of textures and harmonies, using a range of musical structures and styles
- use the elements of music to express and communicate meaning
- interpret non-verbal gestures, making connections to notation and musical expression
- use a variety of notational systems to represent musical thoughts and ideas

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

- improvise and compose patterns and short pieces, using a variety of sound sources and technologies
- present music, co-ordinating reading, listening, and playing/singing skills
- perform, alone and with others, music expressing a broad range of thoughts, images, and feelings

### Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value the role of the arts in creating and reflecting culture.

- identify and describe uses of music in daily life, both local and global
- identify opportunities to participate in music in school, community, and the world of work
- compare music from a range of cultural and historical contexts
- examine and describe ways in which music influences and is influenced by local and global culture

GCO 4: Students will be expected to respect the contributions of individuals and cultural groups to the arts in local and global contexts and value the arts as a record of human experience and expression.

- reflect on ways in which music expresses the history and the cultural diversity of local, national, and international communities
- examine ways in which music enhances and expresses life's experiences

## General Curriculum Outcomes    Key-Stage Curriculum Outcomes

*By the end of grade 9, students will have achieved the outcomes for entry–grade 6 and will also be expected to*

GCO 5: Students will be expected to examine the relationship among the arts, societies, and environments.

- define relationships among music, other arts, and other subjects
- examine the roles that music plays in local and global communities

### Perceiving and Responding

GCO 6: Students will be expected to apply critical thinking and problem-solving strategies to reflect on and respond to their own and others' expressive works.

- examine and explore a range of possible solutions to musical challenges
- use processes of description, analysis, interpretation, and evaluation to make and support informed responses to their own and others' music and musical performances
- critically reflect on ideas and feelings in works of music, and identify patterns, trends, and generalizations

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works.

- identify combinations of instruments and sound sources, including electronic sources
- identify and describe instruments common to cultures and countries included in the social studies curriculum
- explore a range of non-acoustic musical sound sources
- describe the relationship of instruments and other technologies to the mood and feeling of their own and others' music

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

- discuss why a range of musical works has been created
- analyse the source of ideas and reasons for musical decisions in light of original intent
- use feedback from others to examine their own music work in light of their original intent
- analyse performances and provide critical commentary on aspects of musical presentation in light of the performers' intent

# Physical Education

## General Curriculum Outcomes

*Students will be expected to*

### Knowing

- demonstrate an understanding of the concepts that support human movement
- demonstrate a knowledge of the components and processes needed to develop and maintain a personal level of functional fitness

### Doing

- demonstrate motor skills in all movement categories using efficient and effective body mechanics
- participate regularly in a variety of activities that develop and maintain personal physical fitness
- demonstrate creativity in all movement categories

### Valuing

- demonstrate positive personal and social behaviours and interpersonal relationships
- demonstrate positive attitudes toward and an appreciation of physical activity through participation
- demonstrate awareness of career and occupational opportunities related to physical activities

## Specific Curriculum Outcomes

*Students will be expected to*

### Active Living

- set and modify goals to develop personal fitness to maintain a healthy lifestyle
- categorize activities and exercises according to cardiovascular benefits
- describe and practise relaxation techniques for stress management
- describe the relationship between nutrition and activity
- explain the benefits of and demonstrate warm-up and cool-down activities
- participate in activities that enhance cardiovascular fitness, muscular strength, endurance, and flexibility
- identify resources in the community that contribute to active living

### Outdoor Activities

- know and practise safety procedures and routines in a variety of outdoor activities
- find a desired direction of travel by taking a compass bearing
- know and understand the concept of reading a map
- participate in activities or games that demonstrate sensitivity towards the environment (e.g., school grounds clean-up)
- participate in at least one land-based (e.g., hiking, orienteering) and one water-based (e.g., swimming, canoeing) seasonal activity that practises environmental safety

### Dance

- perform a variety of individual novelty dances (e.g., Y.M.C.A., Macarena, line dance, limbo)
- perform an aerobic dance sequence to music
- demonstrate the use a variety of objects (e.g., fans, drums, hats) to create dances
- perform a variety of line, circle, and square dances learned in elementary school
- create and perform movement sequences to a variety of music and rhythmic forms

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**General Curriculum Outcomes    Specific Curriculum Outcomes****Educational Gymnastics**

- demonstrate safety procedures and practices to avoid unnecessary risks
- perform correct techniques for basic gymnastics skills (e.g., rolls, cartwheels, handstands)
- demonstrate travel, balance, and weight transfers on the floor and on small and/or large equipment

**Sport Experience**

- demonstrate sport-specific skills and be able to break them down into their components: preparation, action, follow-through
- participate in a wide variety of sports and games
- demonstrate an understanding of rules with regard to safety
- demonstrate an understanding of rules in game situations
- demonstrate positive personal and social behaviours that emphasize fair play

# Science

## General Curriculum Outcomes

### STSE

GCO 1: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology.

### Skills

GCO 2: Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions.

### Knowledge

GCO 3: Students will construct knowledge and understandings of concepts in life science, physical science, and Earth and space science, and apply these understandings to interpret, integrate, and extend their knowledge.

### Attitudes

GCO 4: Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment.

## Specific Curriculum Outcomes

*Students will be expected to*

### Life Science: Interactions within Ecosystems

#### Components of an Ecosystem

- identify, delimit, and investigate questions related to a local ecosystem (208-2, 208-3)
- use instruments effectively and accurately to investigate components of an ecosystem (209-3)
- organize and record data collected in an investigation of an ecosystem (209-4)
- describe interactions between biotic and abiotic factors in an ecosystem (306-3)
- identify the roles of producers, consumers, and decomposers in a local ecosystem and describe both their diversity and their interactions (304-2)
- classify organisms as producers, consumers, and decomposers (210-1)
- distinguish between scientific terms such as consumer, decomposer, producer, etc. (109-12)
- explain how biological classification takes into account the diversity of life on Earth, using the terms **producer**, **consumer**, and **decomposer** (304-1)
- explain that observations and identification of similar characteristics enables classification in an ecosystem (109-1)

#### Food Webs

- demonstrate the importance of choosing words that are scientifically appropriate by using these words in context (109-13)
- prepare a chart that describes how energy is supplied to, and how it flows through, a food web (210-2, 306-1)
- identify the strengths and weaknesses of a diagram showing the flow of energy in an ecosystem (210-3)
- apply the concept of a food web as a tool for interpreting the structure and interactions of a natural system (111-6)
- describe how matter is recycled in an ecosystem through interactions among plants, animals, fungi, and microorganisms (306-2)

## General Curriculum Outcomes

## Specific Curriculum Outcomes

*Students will be expected to*

- identify and evaluate potential applications of the recycling of matter in an ecosystem (210-12)

### Decomposers

- describe conditions essential to the growth and reproduction of plants and microorganisms in an ecosystem, and relate these conditions to various aspects of the human food supply (304-3)
- provide examples of how knowledge of microorganisms has resulted in the development of food production and preservation techniques (111-1)

### Ecological Succession

- identify signs of ecological succession in a local ecosystem (306-4)
- predict what an ecosystem will look like in the future on the basis of the characteristics of the area and the long-term changes (succession) observed in the site (208-5)

### Action

- propose and defend a course of action to protect the local habitat of a particular organism (113-11, 211-5)
- provide examples of problems that arise in the environment that cannot be solved using scientific or technological knowledge (113-10)
- use various print and electronic sources to research individuals or groups in Canada interested in protecting the environment (112-4, 112-8, 209-5)

### Earth and Space Science: Earth's Crust

#### Geological Plate Tectonics and Time Scale

- compare some of the catastrophic events, such as earthquakes and volcanic eruptions, that occur on or near the Earth's surface (311-4)
- organize and analyse data on the geographical and chronological distribution of earthquakes and volcanoes to determine patterns and trends (209-4, 210-6, 311-5)

**General Curriculum Outcomes****Specific Curriculum Outcomes**

*Students will be expected to*

- describe how plate tectonic theory has evolved in light of new geological evidence (110-4)
- provide examples of ideas and theories used in the past to explain volcanic activity, earthquakes, and mountain building (110-1)
- provide examples of Canadians and Canadian institutions that have contributed to our understanding of local, regional, and global geology (112-12)
- explain the processes of mountain formation and the folding and faulting of the Earth's surface (311-1)
- develop a chronological model or geological time scale of major events in Earth's history (209-4, 311-6)

**Rocks and Minerals**

- classify minerals on the basis of their physical characteristics by using a dichotomous key (210-1, 310-2a)
- work co-operatively with team members to plan how to determine a geological profile of a land mass by using simulated core sampling techniques (211-3)
- evaluate the individual and group processes in planning how to determine a geological profile of a land mass using simulated core sampling in geological models (210-12, 211-4)
- describe the composition of the Earth's crust and some of the technologies which have allowed scientists to study geological features in an on the Earth's crust (109-7, 111-2, 310-1)

**The Rock Cycle**

- identify questions to investigate arising from the study of the rock cycle (208-2)
- use tools and apparatus safely when modelling or simulating the formation of rock types (209-6)
- classify rocks on the basis of their characteristics and method of formation (310-2b)
- explain how society's needs led to developments in technologies designed to use rocks (112-3)

**General Curriculum Outcomes****Specific Curriculum Outcomes**

*Students will be expected to*

**Weathering**

- explain various ways in which rocks can be weathered (311-2)

**Soil**

- design and conduct a fair test of soil properties (209-1)
- classify various types of soil according to their characteristics, and investigate ways to enrich soils (310-3)
- relate various meteorological, geological, chemical, and biological processes to the formation of soils (311-3)
- identify some positive and negative effects and intended and unintended consequences of enriching soils (113-1)
- provide examples of how science and technology associated with soil enrichment affects their lives (112-7)
- suggest solutions to problems or issues related to soil use and misuse (113-7)

**Physical Science: Heat****Temperature**

- select appropriate methods and tools in order to construct and test an air thermometer (208-8, 210-13)
- compile and display data collected in the test of the design of an air thermometer (210-2)
- compare various instruments used to measure temperature (308-1)
- use and read a thermometer safely and properly (209-3)
- provide examples of temperature-measuring technologies used in the past (110-7)

**Temperature and Matter**

- explain how each state of matter reacts to changes in temperature (308-3)
- explain changes of state, using the particle model of matter (308-4)

**General Curriculum Outcomes****Specific Curriculum Outcomes**

*Students will be expected to*

- explain temperature, using the concept of kinetic energy and the particle model of matter (308-2)

**Heat Transfer**

- compare transmission of heat by conduction, convection, and radiation (308-5)
- describe the science underlying heat transfer in solar heating systems and central heating systems in houses (111-5)
- describe how a technology associated with heat has affected lives (113-4)
- compare, in qualitative terms, the heat capacities of some common materials (308-7)
- carry out a procedure to investigate how various surfaces absorb radiant heat and control major variables (209-1)
- identify potential sources of error in data while investigating how various surfaces absorb radiant heat (210-10)
- identify, evaluate, and draw a conclusion about the relationship between colour and heat absorption in materials (210-11, 210-12)
- communicate results of experiments and/or investigations related to colour and heat absorption by using language and a variety of tables, charts, and/or graphs (211-2)
- describe how various surfaces absorb radiant heat (308-6)

**Technology, Temperature, and Heat**

- describe how our needs related to heat can lead to development in science and technology (112-1)
- identify examples of science- and technology-based careers that are associated with heat and temperature (112-9)
- provide examples of insulating technologies used in the past that were developed through trial and error (109-4)

**General Curriculum Outcomes****Specific Curriculum Outcomes**

*Students will be expected to*

**Physical Science: Mixtures and Solutions****Mixtures**

- relate the formation and separation of everyday mixtures and solutions to disciplines such as chemistry and engineering (109-10)
- safely using tools and apparatus, identify and separate the components of a variety of mixtures, using ... (209-6, 307-2)
- identify new questions and problems about mixtures that arise from what is learned (210-16)

**Solutions**

- distinguish between pure substances and mixtures, using the particle theory of matter (307-1)
- describe the characteristics of solutions, using the particle model of matter and the terms ... (109-14, 307-3)
- describe the science underlying a distillation apparatus (111-5)
- demonstrate a knowledge of WHMIS standards by recognizing and following warnings labels symbols (209-7)

**Concentration of Solutions**

- describe the concentration of solutions qualitatively (307-4)
- identify different ways that concentrations can be demonstrated for various substances (109-7)
- calculate concentrations of solutions in g/L (210-9)
- rephrase questions related to solubility in a testable form and clearly define practical problems (208-1)
- design and carry out procedures to study the effect of temperature on solubility (208-6, 209-1)
- identify and suggest explanations for discrepancies in data after carrying out procedures designed to study the effect of temperature on solubility (210-7)
- predict the solubility of a solute by interpolating or extrapolating from graphical data (210-4)
- describe qualitatively the factors that affect solubility (307-5)
- use a commercial or student-made hydrometer effectively and accurately for collecting data (209-3)

**General Curriculum Outcomes****Specific Curriculum Outcomes**

*Students will be expected to*

**Mixtures, Solutions, and the Environment**

- provide examples of how science and technology, related to mixtures and solutions, affect our lives (112-7)
- identify some positive and negative effects and intended and unintended consequences of a particular scientific or technological development related to mixtures and solutions (113-1)
- provide examples showing the evolution of refining and separation techniques (109-4)

# Social Studies (Draft)

## General Curriculum Outcomes      Specific Curriculum Outcomes

*Students will be expected to*

### Citizenship, Power, and Governance

GCO: Students will be expected to demonstrate an understanding of the rights and responsibilities of citizenship and the origins, functions, and sources of power, authority, and governance.

### Individuals, Societies, and Economic Decisions

GCO: Students will be expected to demonstrate an understanding of culture, diversity, and world view, recognizing the similarities and differences reflected in various personal, cultural, racial, and ethnic perspectives.

### People, Place, and Environment

GCO: Students will be expected to demonstrate the ability to make responsible economic decisions as individuals and as members of society.

### Culture and Diversity

GCO: Students will be expected to demonstrate an understanding of the interdependent relationship among individuals, societies, and the environment—locally, nationally, and globally—and the implications for a sustainable future.

### Interdependence

GCO: Students will be expected to demonstrate an understanding of the interactions among people, places, and the environment.

**Note:** The specific curriculum outcomes for social studies listed below are draft outcomes. They are provided for your information only. Until this new curriculum is implemented the current curriculum is to be followed.

### Unit One: Introduction

- explore the general concept of empowerment

### Unit Two: Economic Empowerment

- investigate the various ways that economics empowers or disempowers people
- analyse how commodities for economic empowerment have changed
- identify and analyse trends that could impact future economic empowerment

### Unit Three: Political Empowerment

- evaluate the conditions of everyday life for diverse peoples living in British North America in the mid 1800s, including Aboriginal peoples, African-Canadians and Acadians
- analyse how the struggle for responsible government was an issue of political empowerment and disempowerment
- identify, interpret and analyse the internal and external factors that led to Confederation
- explain the political structure of Canada as a result of Confederation

### Unit Four: Cultural Empowerment

- explain how the expansion and development of Canada during the 1870s and early 1880s affected its various people and regions
- analyse the events of the Northwest Rebellion to determine its impact on internal relations in Canada
- analyse the degree of empowerment and disempowerment for Aboriginal peoples in present day Atlantic Canada during this period
- analyse the struggle for empowerment by new cultural groups immigrating to Canada between 1870 and 1914

**General Curriculum Outcomes    Specific Curriculum Outcomes****Time, Continuity, and Change**

GCO: Students will be expected to demonstrate an understanding of the past and how it affects the present and the future.

*Students will be expected to*

**Unit Five: Societal Empowerment**

- evaluate the conditions of everyday life for the peoples of Canada at the turn of the 20th century
- describe the impact of the Industrial Revolution on industry and workers in the Maritimes and across Canada
- explain how women became more empowered through their role in the social reform movements of the late 19th and early 20th century

**Unit Six: National Empowerment**

- identify and describe events in the early 20th century that led Canada toward independence
- explain Canada's participation in WWI
- demonstrate an understanding of the impact of WWI on Canada and her people

**Unit Seven: Summative**

- portray an understanding of the extent of empowerment of individuals, groups, and the nation up to 1920

# Technology Education (Draft)

## Communications Technology 7

### General Curriculum Outcomes    Specific Curriculum Outcomes

*Students will be expected to*

#### Technological Problem Solving

GCO 1: Students will be expected to design, develop, evaluate, and articulate technological solutions.

#### Technological Systems

GCO 2: Students will be expected to operate and manage technological systems.

#### History and Evolution of Technology

GCO 3: Students will be expected to demonstrate an understanding of the history and evolution of technology, and of its social and cultural implications.

#### Technology and Careers

GCO 4: Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of technology on the nature of work.

#### Technological Responsibility

GCO 5: Students will be expected to demonstrate an understanding of the consequences of their technological choices.

#### Big Ideas

##### Tools of Communication—Past, Present, and Future

- explore the evolution of communications technology
- examine the role of Atlantic region in the evolution of communications technology
- explore convergence in a variety of information and communications technologies
- explore and identify information and communications tools, systems, and networks in daily use at home and in school

##### Using Communications Tools for Everyday Activities

- work effectively in a variety of communications media
- use communications technologies to build new knowledge from existing information by accessing, evaluating, and selecting appropriate information, and creating, modifying, and disseminating information

##### Processes of Communication

- identify examples of the basic communications processes of designing/encoding/decoding, transmitting/receiving, storing/retrieving
- differentiate between analog and digital communications principles and technologies

##### Communications Systems

- explore new and emerging communications systems
- examine the effect of rapid change in communications systems on themselves and society
- demonstrate an understanding of the interactions among communications technology and society
- examine the role of communications systems as a tool for lifelong learning

**General Curriculum Outcomes    Specific Curriculum Outcomes**

*Students will be expected to*

**Introduction to Communications Graphics**

- understand the use of technical drawings
- identify specific examples of isometric and orthographic drawings
- use the language and terminology of communications processes and communications tools

**Introduction to Graphic Design**

- demonstrate knowledge of the elements of graphic or visual design
- demonstrate knowledge of the principles of graphic design

**Technological Problem Solving**

- demonstrate knowledge of technological problem solving

**Basic Skills****Communication Graphics—Sketching and Simple Technical Drawings**

- use a range of two-dimensional and three-dimensional representational techniques to communicate technical solutions and ideas

**Ownership and Copyright**

- explore ethical decision making and intellectual honesty as factors in making technological choices

**Creating, Importing, and Acquiring Images, Audio, and Video**

- use image editing programs to create bitmapped images and structured drawings
- digitize still images by using scanners, digital cameras, or video capture devices
- digitize sound by using audio cards, microphones, and other devices
- (Optional) digitize video clips by using digital cameras, video capture cards, or IEEE1394 devices

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## General Curriculum Outcomes    **Specific Curriculum Outcomes**

*Students will be expected to*

### **Creating Documents**

- use graphic design elements and principles to plan simple documents
- use a variety of software to create documents that incorporate text and graphics

### **Presenting Your Ideas**

- develop a presentation outline
- develop a presentation using multimedia software

### **Design Activities**

#### **Step 1: Problem Situation**

- identify real life communication problem situations and opportunities, and select one for further development
- develop a rationale for solving a particular problem, and effectively communicate that rationale to others

#### **Step 2: Design Briefs**

- identify and clearly state communications problems
- specify conditions and criteria that affect how the problem will be solved
- generate a design brief and place it in the design portfolio

#### **Step 3: Investigation and Research**

- investigate ways that other people solved similar problems
- investigate resources available to solve this problem
- use the design portfolio to document their investigation and research

#### **Step 4: Identify Possible Solutions**

- use one or more idea generation strategies to identify a range of alternative solutions
- use the design portfolio to document the possible solutions

**General Curriculum Outcomes    Specific Curriculum Outcomes**

*Students will be expected to*

**Step 5: Select the Best Solution**

- develop criteria for evaluating solution options
- examine the solution options and select the most appropriate, using established criteria
- use the design portfolio to document the proposed solution and the rationale for choosing it

**Step 6: Develop the Solution**

- identify specific tools and resources and determine new skills they will need to acquire
- create a plan of action
- develop the solution, redesigning as necessary, using safe practices
- use the design portfolio to document the development process, including changes and the rationale for them
- organize data using an appropriate format to communicate ideas and information about technological solutions

**Step 7: Evaluate the Solution**

- establish criteria for evaluating the solution
- evaluate their solution based on pre-determined criteria
- use the design portfolio to document the evaluation process, including evaluation criteria and how the solution was assessed

**Step 8: Present the Report**

- develop a presentation plan based on information recorded in the design portfolio
- use appropriate presentation tools and strategies to develop a presentation that demonstrates how the design model was implemented, and the implications of the solution
- present the solution and the report to the class

# Visual Arts

## General Curriculum Outcomes

## Key-Stage Curriculum Outcomes

**Note:** Specific curriculum outcomes have not yet been developed for Visual Arts 7–9. Teachers may wish to use the following general curriculum outcomes and key-stage curriculum outcomes from *Foundation for the Atlantic Canada Arts Education Curriculum* in planning their visual arts program.

*By the end of grade 9, students will have achieved the outcomes for entry–grade 6 and will also be expected to*

### Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

- manipulate and organize design elements and principles to achieve planned compositions
- assess and utilize the properties of various art media and their ability to convey messages and meaning
- create artworks, integrating themes found through direct observation, personal experience, and imagination
- respond verbally and visually to the use of art elements in personal works and the work of others
- analyse and use a variety of image development techniques (e.g., distortion, metamorphosis, fragmentation)
- demonstrate increasing complexity in art skills and techniques

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

- invent and incorporate unique visual symbols to create personal meaning in their art
- analyse and make use of visual, spatial, and temporal concepts in creating art images
- select, critique, and organize a display of personally meaningful images from their own portfolio
- acknowledge and respect individual approaches to and opinions of art
- work interactively, co-operatively, and collaboratively

### Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value the role of the arts in creating and reflecting culture.

- examine the role and the influence of visual images in their daily lives, including mass media and popular culture
- evaluate visual communication systems as a part of daily life
- through their own art develop concepts and imagery based on personal ideas and experience

## General Curriculum Outcomes    Key-Stage Curriculum Outcomes

*By the end of grade 9, students will have achieved the outcomes for entry–grade 6 and will also be expected to*

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experiences and expression.

- recognize and describe the role of the visual arts in challenging, sustaining, and reflecting society’s beliefs and traditions
- identify opportunities to participate in the visual arts in school, community, and the world of work
- develop an appreciation of diversity among individuals as reflected in their art work
- recognize the existence of a variety of visual languages that reflect cultural, socio-economic, and national origins
- recognize that and investigate how art as a human activity emerges from human needs, values, beliefs, ideas, and experiences
- demonstrate an understanding of how individual and societal values affect our response to visual art
- create personally meaningful imagery that reflects influence from a variety of historical and contemporary artists
- compare the characteristics of artwork from different cultures and periods in history

GCO 5: Students will be expected to examine the relationship among the arts, societies, and environments.

- draw upon other arts disciplines as a resource in the creation of their own art works
- use, with confidence, experiences from their personal, social, cultural, and physical environments as a basis for visual expression
- demonstrate an understanding of how individual and societal values affect our response to visual art
- interpret visual parallels between the structures of natural and built environments
- recognize and respect the ethical and moral considerations involved in copying works

### Perceiving and Responding

GCO 6: Students will be expected to apply critical thinking and problem-solving strategies to reflect on and respond to their own and others’ expressive works.

- develop independent thinking in interpreting and making judgments about subject matter
- constructively critique the work of others
- analyse the works of artists to determine how they have used the elements and principles of design to solve specific visual design problems
- engage in critical reflective thinking as part of the decision-making and problem-solving process
- investigate and analyse how meaning is embedded in works of art

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## General Curriculum Outcomes    Key-Stage Curriculum Outcomes

*By the end of grade 9, students will have achieved the outcomes for entry–grade 6 and will also be expected to*

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works.

- practise safety associated with proper care of art materials and tools
- create images that solve complex problems that take into consideration form and function, and understand the value of looking for alternative solutions
- evaluate and use various media and technological processes for their sensory qualities and ability to convey messages and meaning
- realize the direct influence expanding technology has had and continues to have on the individual and society

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

- analyse artwork and determine the artist's intention
- analyse why images were created by artists
- identify and discuss the source of ideas behind their own work and the work of others
- use feedback from others to examine their own art works in light of their original intent