



Learning

Outcomes

Framework

April 2004

Grade 6

Learning Outcomes Framework
Grade 6

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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 as 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: 2002–2003*. In planning the appropriate use of information technologies as tools for learning and teaching, teachers and administrators should also refer to *Vision and Learning Outcomes for the Integration of Information Technologies within Nova Scotia Public School Programs*.

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 which 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 which 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 which 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 are also included. It should be noted that specific curriculum outcomes noted for social studies and science are draft statements. While implementation of new curriculum in these subjects is not yet required, teachers may wish to consider these draft statements in planning their instructional programs.

Elementary Program Components

Elementary schools must include, for all children in each year's program for grades primary–6, health education, language arts, mathematics, music, physical education, social studies, science, and visual arts. In English schools, core French must be offered beginning at grade 4. Where offered, Gaelic as a second language and Mi'kmaq as a second language may be introduced at grade 3. The elementary program does not include technology education as a subject area; however, the general and key-stage curriculum outcomes for technology education included in this booklet provide a framework for teachers of grades primary–6 to use in integrating technology education within learning experiences across the curriculum.

Core French

Key-Stage Curriculum Outcomes

By the end of grade 6, students will be expected to

Specific Curriculum Outcomes

Students will be expected to

Communication

GCO: On the basis of their experience in the Core French curriculum, 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"> • cope in a classroom where French is the language spoken • share information by using simple sentences and/or by answering questions • use simple questions for information • share their tastes, preferences, interests and feelings • participate in a variety of interactive activities | <ul style="list-style-type: none"> • follow and give directions (developing) • introduce themselves, greet someone (developing) • ask for and give information (developing) • express and justify their wishes and preferences (developing) • identify and describe objects, animals, people, events and places that are part of their environment (developing) • participate in conversations, games, brain-storming, surveys and skits (developing) • extend an invitation (developing) • convince (developing) • retell an event (developing) • make a report (developing) |
| <ul style="list-style-type: none"> • demonstrate an understanding of the main idea in a simple text • pick out relevant details in a simple text • respond personally to simple texts • produce a variety of simple texts, often by following a model | <ul style="list-style-type: none"> • recognize the characteristics of different types of texts: expressive, informative, persuasive, humorous, poetic (developing) • read to find specific information in newspapers, magazines, rules, directions, pamphlets, jokes, songs, comic strips and technology resources (developing) • respond personally to texts through song, mime, drawing and drama (developing) • compose greeting cards, letters, simple descriptions, reports, lists, legends for illustrations and maps, slogans, songs, chants, rhymes, comic strips, posters, crossword puzzles and e-mail (developing) • revise and correct their text with a checklist or model (developing) |

Key-Stage Curriculum Outcomes

By the end of grade 6, students will be expected to

Specific Curriculum Outcomes

Students will be expected to

Culture

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

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

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| <ul style="list-style-type: none"> • identify and locate certain francophone communities locally, provincially and nationally | <ul style="list-style-type: none"> • recognize and describe, both orally and in writing, the Acadian presence locally and provincially; for example, the names of families, streets, schools, restaurants and place (developing) |
| <ul style="list-style-type: none"> • identify and describe certain realities of francophone cultures | <ul style="list-style-type: none"> • recognize the francophone presence in other provinces, communities (developing) • recognize and describe, both orally and in writing, certain aspects of the Acadian and francophone cultures in other provinces; for example, food, local festivals (developing) |
| <ul style="list-style-type: none"> • name some similarities and differences between their cultures and the francophone cultures | <ul style="list-style-type: none"> • compare their own culture with the Acadian culture (developing) • compare certain aspects of the Acadian and francophone culture in Canada and elsewhere in the world (developing) |
| <ul style="list-style-type: none"> • identify some contemporary francophone personalities | <ul style="list-style-type: none"> • listen to French popular music (developing) • name some Acadian and Quebecois musicians, athletes, politicians, etc. (developing) |
| <ul style="list-style-type: none"> • demonstrate an awareness of Canada's cultural mosaic | <ul style="list-style-type: none"> • listen to/watch the media in French, including the Internet (developing) • read advertisements concerning cultural activities, for example, pamphlets, posters, newspapers, magazines (developing) • identify celebrities representative of the Canadian mosaic (developing) |
| <ul style="list-style-type: none"> • demonstrate knowledge of authentic nursery rhymes and songs | <ul style="list-style-type: none"> • sing "Ô Canada" (developing) • sing traditional folk songs (developing) • use nursery rhymes, rhyming games (developing) |
| <ul style="list-style-type: none"> • identify the signs of bilingualism in our society | <ul style="list-style-type: none"> • be aware that labels are written in both official languages (developing) • recognize that Canadian advertising is done in both official languages (developing) |

Key-Stage Curriculum Outcomes

By the end of grade 6, students will be expected to

Specific Curriculum Outcomes

Students will be expected to

General Language Education

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

- choose and implement strategies to facilitate their communication in French and improve their learning

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| <ul style="list-style-type: none"> use learning strategies, communication strategies and social strategies to communicate in French, both orally and in writing | <ul style="list-style-type: none"> anticipate the message in oral or written texts (developing) create connections between an oral or written text and their prior knowledge (developing) use images, graphic representations, objects, gestures and actions to communicate (developing) ask one to repeat, to slow down (developing) ask for clarifications, explanations (developing) make use of production model (developing) use context to understand a message (developing) follow the steps in the writing process (developing) recognize cognates and words in the same family (developing) identify key words in a text (developing) listen attentively and selectively for information (developing) show a tolerance for ambiguity (developing) make use of a variety of resources and technologies (developing) take risks and accept error (developing) interact and cooperate with their peers (take turns, accept the suggestions of others, share information and materials) (developing) practice (developing) reflect on and evaluate their own learning (developing) |
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Language

GCO: On the basis of their experience in the Core French curriculum, 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"> recognize the vocabulary, expressions, and structures relating to the needs in the classroom and to areas of experience use the vocabulary, expressions, and structures related to needs in the classroom and to areas of experience | <ul style="list-style-type: none"> introduce themselves, greet someone using simple sentences in the present tense (developing) ask for and give information using simple sentences in the present tense, the interrogative, and adjectives (developing) ask for and give information using simple sentences in the present and past tenses (first person singular) (developing) |
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Key-Stage Curriculum Outcomes

Specific Curriculum Outcomes

Students will expected to

- follow and give directions, using the imperative and infinitive (developing)
- recount an event or do a report, using the present and past tenses, the negative, and conjunctions such as *et, mais, ou, puis, parce que* (developing)
- infer the development and ending of a story using the verb tenses and conjunctions (developing)
- compose different texts using simple sentences in the present tense, the imperative, negative and interrogative (developing)
- compose different texts using simple sentences in the future and past tenses (first person singular) and conjunctions (developing)
- revise and correct their texts using knowledge of vocabulary, expressions, gender, and number accord with verb forms and adjectives (developing)

English Language Arts

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

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

- 1.1 contribute thoughts, ideas, and questions to discussion and compare their own ideas with those of peers and others
- 1.2 ask and respond to questions to seek clarification or explanation of ideas and concepts
- 1.3 defend and/or support their opinions with evidence
- 1.4 listen critically to others' ideas or opinions and points of view

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

- 2.1 contribute to and respond constructively in conversation, small-group and whole-group discussion
- 2.2 use word choice and emphasis, making a conscious attempt to produce a desired effect
- 2.3 give and follow instructions and respond to a variety of questions and instructions
- 2.4 engage in, respond to, and evaluate a variety of oral presentations and other texts

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

- 3.1 listen attentively and demonstrate awareness of the needs, rights, and feelings of others
- 3.2 detect example of prejudice, stereotyping, or bias in oral language; recognize their negative effect on individuals and cultures; and attempt to use bias-free language
- 3.3 make a conscious attempt to consider the needs and expectations of their audience

GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.

- 4.1 select, independently, texts appropriate to their range of interests and learning needs
- 4.2 read widely and experience a variety of children's literature with an emphasis in genre and authors
- 4.3 use a wider range of pictorial, typographical, and organizational features of written texts to obtain, verify, and reinforce their understanding of information
- 4.4 use and integrate the various cueing systems and a variety of strategies with increasing independence to construct meaning
- 4.5 reflect on and discuss their own processes and strategies in reading and viewing

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.

- 5.1 answer, with increasing independence, their own questions and those of others by selecting relevant information from a variety of texts
- demonstrate understanding of the purpose of classification systems and basic reference materials
 - use a range of reference texts and a database or an electronic search to facilitate the selection process

GCO 6: Students will be expected to respond personally to a range of texts.

- 6.1 explain why a particular text matters to them and demonstrate an increasing ability to make connections among texts
- 6.2 reflect on and give reasons for their interpretations of an increasing variety of texts

GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.

- 7.1 recognize that facts can be presented to suit an author's purpose and point of view
- consider information from alternative perspectives
- 7.2 identify the conventions and structure of a variety of print and media texts and genres
- 7.3 make connections with the purpose of each text or genre
- 7.4 respond critically to texts by
- applying a growing range of strategies to analyse and evaluate a text
 - demonstrate growing awareness that all texts reflect a purpose and a perspective
 - recognizing when language is being used to manipulate, persuade, or control them
 - detecting prejudice, stereotyping, and bias

GCO 8: Students will be expected to use writing and other forms of representation to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imaginations.

- 8.1 use a range of strategies in writing and other ways of representing to
- frame questions and design investigations to answer their questions
 - find topics of personal importance
 - record, develop, and reflect on ideas
 - compare their own thoughts and beliefs to those of others
 - describe feelings, reactions, values, and attitudes
 - record and reflect on experiences and their responses to them
 - formulate goals for learning
 - practise and apply strategies for monitoring learning
- 8.2 select appropriate note-making strategies from a growing repertoire
- 8.3 make language choices to enhance meaning and achieve interesting effects in imaginative writing and other ways of representing

General Curriculum Outcomes Specific Curriculum Outcomes

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

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.

Students will be expected to

- 9.1 create written and media texts using an increasing variety of forms
 - demonstrate understanding that particular forms require the use of specific features, structures, and patterns
- 9.2 address the demands of an increasing variety of purposes and audiences
 - make informed choices of form, style, and content for specific audiences and purposes
- 9.3 invite responses to early drafts of their writing/media productions
 - use audience reaction to help shape subsequent drafts
 - reflect on their final drafts from a reader's/viewer's/listener's point of view
- 10.1 select from a range of prewriting, drafting, revising, editing, proofreading, and presentation strategies to develop effective pieces of writing and other representations
- 10.2 use the conventions of written language in final products
- 10.3 use technology with increasing proficiency to create, revise, edit, and publish texts
- 10.4 demonstrate commitment to shaping pieces of writing and other representations
- 10.5 select, organize, and combine relevant information, from three to five sources

Health Education

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.

A2.1 demonstrate an understanding of how the body systems work together

Strategies for Healthy Living

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

B1.1 demonstrate an understanding of the factors that determine nutrient and energy needs
B1.2 assess the nutritional value of various convenience foods and restaurant foods

B2.1 demonstrate assertiveness when refusing potentially harmful substances and behaviours

B3.1 identify and practise babysitting safety precautions
B3.2 identify and practise strategies for preventing injury in various non-competitive sports
B3.3 identify and practise safety precautions when using or working with electricity
B3.4 identify and practise strategies for protecting themselves and others from abuse and violence

B4.1 practise strategies for the prevention of skin cancer
B4.2 practise strategies for the prevention of tooth and gum disease
B4.3 identify services in the community for the prevention of disease
B4.4 maintain a personal health history

B5.1 identify and practise strategies for making healthy adjustments to change
B5.2 identify strategies for dealing with life crises

B7.1 participate in a broad range of physical activities
B7.2 identify the effect of a regular physical fitness program on the body systems

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

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.

- C2.1 demonstrate an awareness of the effect of change within the family
- C2.2 identify laws related to the possession and distribution of tobacco, alcohol, prescription drugs, and street drugs
- C3.1 assess the impact of current and emerging technologies on the health and fitness of Canadians
- C4.1 identify ways that individuals, communities, and countries co-operate to protect and maintain environmental health
- C5.1 demonstrate an appreciation of the heritage of cultural groups in the community and province
- C5.2 demonstrate an awareness of provincial services and facilities for people with special needs

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 document personal traits, interests, abilities, skills, lifestyle preferences, and goals for the future
- D1.2 set personal goals and work towards them
- D1.3 identify and practise effective work habits at home and at school
- D1.4 apply stress management strategies
- D1.5 apply decision-making strategies to complex and/or challenging problems
- D2.1 demonstrate respect and caring in relating with classmates
- D2.2 identify and practise conflict resolution skills
- D2.3 recognize and respect the needs of people in other age groups
- D2.4 identify the consequences of being sexually active
- D3.1 examine the role of the media in shaping and reinforcing lifestyle values and practices
- D3.2 evaluate the usefulness and reliability of various sources of information regarding drugs
- D3.3 identify and evaluate reasons why some people use legal and illegal drugs

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

- D4.1 compare male/female roles in Canada to those in other cultures
- D4.2 identify a range of occupations related to personal interests

- D5.1 practise citizenship at school and in the community and region
- D5.2 identify some of the responsibilities of global citizenship
- D5.3 demonstrate an awareness of human rights and international children's rights

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 represent large numbers in a variety of forms
- A2 represent fractions and decimals
- A3 write and interpret ratios, comparing part-to-part and part-to-whole
- A4 demonstrate an understanding of equivalent ratios
- A5 demonstrate an understanding of the concept of percent as a ratio
- A6 demonstrate an understanding of the meaning of a negative integer
- A7 read and write whole numbers in a variety of forms
- A8 demonstrate an understanding of the place-value system
- A9 relate fractional and decimal forms of numbers
- A10 determine factors and common factors
- A11 distinguish between prime and composite numbers

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

- B1 compute products of whole numbers and decimals
- B2 model and calculate the products of two decimals
- B3 compute quotients of whole numbers and decimals
- B4 model and calculate the quotients of two decimals
- B5 add and subtract simple fractions using models
- B6 demonstrate an understanding of the function nature of input-output situations
- B7 solve and create relevant addition, subtraction, multiplication, and division problems involving whole numbers
- B8 solve and create relevant addition, subtraction, multiplication and division problems involving decimals
- B9 estimate products and quotients involving whole numbers only, whole numbers and decimals, and decimals only
- B10 divide numbers by 0.1, 0.01, and 0.001 mentally
- B11 calculate sums and differences in relevant contexts by using the most appropriate method
- B12 calculate products and quotients in relevant contexts by using the most appropriate method

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

GCO C: Students will explore, recognize, represent, and apply patterns and relationships, both informally and formally.

- C1 solve problems involving patterns
- C2 use patterns to explore division by 0.1, 0.01, and 0.001
- C3 recognize and explain how changes in base or height will affect areas of rectangles, parallelograms, or triangles
- C4 recognize and explain how an increase in height, width, or length of a rectangular prism changes its volume
- C5 recognize and explain how the change in one term of a ratio affects the other term
- C6 represent equivalent ratios using tables and graphs
- C7 represent square and triangular numbers concretely, pictorially, and symbolically
- C8 solve simple linear equations using open frames
- C9 demonstrate understanding of the use of letters to replace open frames

GCO D: Students will demonstrate an understanding of and apply concepts and skills associated with measurement.

- D1 use the relationship among particular SI units to compare objects
- D2 describe mass measurements in tonnes
- D3 demonstrate an understanding of the relationship between capacity and volume
- D4 estimate and measure angles using a protractor
- D5 draw angles of given sizes
- D6 continue to solve measurement problems involving length, capacity, area, volume, mass, and time
- D7 demonstrate an understanding of the relationships among the base, height, and area of a parallelogram
- D8 demonstrate an understanding of the relationship between the area of a triangle and the area of a related parallelogram
- D9 demonstrate an understanding of the relationships among the three dimensions of a rectangular prism and its volume and its surface area

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

- E1 describe and represent the various cross-sections of cones, cylinders, pyramids, and prisms
- E2 make and interpret orthographic drawings of 3-D shapes made with cubes
- E3 make and apply generalizations about the sum of the angles in triangles and quadrilaterals
- E4 make and apply generalizations about the diagonal properties of trapezoids, kites, parallelograms, and rhombi
- E5 sort the members of the quadrilateral “family” under property headings
- E6 recognize, name, describe, and represent similar figures

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

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| | E7 | make generalizations about the planes of symmetry of 3-D shapes |
| | E8 | make generalizations about the rotational symmetry property of all members of the quadrilateral “family” and of regular polygons |
| | E9 | recognize and represent dilatation images of 2-D figures and make connections to similar figures |
| | E10 | predict and represent the result of combining transformations |
| GCO F: Students will solve problems involving the collection, display, and analysis of data. | F1 | choose and evaluate appropriate samples for data collection |
| | F2 | identify various types of data sources |
| | F3 | plot coordinates in four quadrants |
| | F4 | use bar graphs, double bar graphs, and stem-and-leaf plots to display data |
| | F5 | use circle graphs to represent data proportionately |
| | F6 | interpret data represented in scatterplots |
| | F7 | make inferences from data displays |
| | F8 | demonstrate an understanding of the differences among mean, median, and mode |
| | F9 | explore relevant issues for which data collection assists in reaching conclusions |
| GCO G: Students will represent and solve problems involving uncertainty. | G1 | conduct simple simulations to determine empirical probabilities |
| | G2 | evaluate the reliability of sampling results |
| | G3 | analyse simple probabilistic claims |
| | G4 | determine theoretical probabilities |
| | G5 | identify events that could be associated with a particular theoretical probability |

Music

General Curriculum Outcomes

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

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.

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

Specific Curriculum Outcomes

Students will be expected to

- 1.1.1 sing and play with others, with emphasis on an ability to maintain their part within simple textures including two-part repertoire
- 1.2.1 create and interpret music that communicates thoughts, experiences, and feelings
- 1.2.2 demonstrate an awareness of rhythmic/melodic concepts, form, and texture through language, movement, and performance
- 1.3.1 sight read simple melodies from traditional notation with an emphasis on melodic sequence and phrasing
- 1.4.1 create and notate short musical works to express and communicate personal feelings with an emphasis on theme and variations
- 2.1.1 improvise simple harmonic accompaniments
- 2.2.2 select from a variety of materials, techniques, and forms to create, make, and present music
- 2.3.1 participate in small and large ensemble music making, performing a varied repertoire of music
- 3.2.1 participate in, describe, and compare music experiences in their school and community
- 3.3.1 experiment with styles, techniques, and instruments from a variety of cultural and historical contexts in creating, making, and presenting music
- 3.4.1 use a variety of musical forms to give meaning to Canadian cultural and historical events and issues
- 3.5.1 investigate the roles of musicians in their community and potential careers available to those trained in music

General Curriculum Outcomes Specific Curriculum Outcomes

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 experience and expression.

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

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.

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

Students will be expected to

- 4.1.1 use their knowledge and experience to perform and respect music of diverse cultural groups
- 4.2.1 explore the role music plays in the cultures of Latin America and Europe
- 4.3.1 demonstrate an understanding of the power of music, past and present, to express and communicate ideas and feelings
- 5.1.1 examine the role that music plays in popular culture and the media
- 5.1.2 identify and describe connections between music and other disciplines, including arts disciplines
- 5.2.2 express and communicate personal feelings through music and written and spoken language
- 6.1.1 analyse musical solutions to make informed choices based on the thoughts, images, and feelings that the music expresses
- 6.2.1 analyse and make decisions about various interpretations of a work
- 6.2.2 identify form and principles of design in classroom repertoire and their own compositions
- 6.4.1 compare subjective and objective responses to music, and examine the relationship between them
- 7.1.1 recognize by sight and sound and categorize by family, orchestral, band, and keyboard instruments of various cultures
- 7.2.1 select from a variety of technologies to create and present music, using sound qualities for expressive effect
- 7.3.1 understand that changing technologies have produced new opportunities for expressive effect
- 7.4.1 demonstrate an awareness of ways in which technologies can be used to record and produce music (e.g., print, CDs, records, tapes, texts)

General Curriculum Outcomes Specific Curriculum Outcomes

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

Students will be expected to

- 8.1.1 discover the reasons that specific musical works have been created
- 8.2.1 communicate the source of ideas and reasons for their own musical decisions
- 8.3.1 compare interpretations of their own and others music, using appropriate terminology and considering the musical intent
- 8.4.1 reflect on their music making in light of what was intended through the use of available recording technologies

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

- seek out, participate with, and show respect for persons of like and different skill levels
- select and lead a warm-up and/or cool-down activity
- perform activity-specific stretching
- demonstrate a willingness to choose to exercise at home for personal enjoyment and benefit
- participate in games, sports, dance, and outdoor pursuits, both in and outside school, based on individual interests and capabilities
- demonstrate the ability to officiate a small-group game in class, intramural, or in the community (e.g., boys and girls club, scouts/guides)
- select activities designed to improve and maintain muscular strength and endurance, flexibility, and cardiorespiratory functioning
- explain the benefits of good nutrition on activity level

Alternative Environments

- participate in an orienteering-type activity using a map and compass on the school grounds or at a local park
- describe a list of activities in which he/she participates in alternative environments
- demonstrate an understanding of the implications of the term “environmental citizenship”
- appreciate and recognize the effects of human activity on the environment
- set up a mock campsite on the school grounds (including tent set-up, site preparation)

Dance

- teach a dance of their choice to a group of younger students
- perform dance sequences that show smooth transitions between movements
- create dance sequences using a variety of external stimuli (e.g., parachute, scarf, umbrella, home-made instruments) focussing on body shapes

General Curriculum Outcomes**Specific Curriculum Outcomes**

Students will be expected to

- select a dance form and research its historical, social, and cultural context
- recognize the role of dance in getting to know and understand others' cultures

Educational Gymnastics

- use small equipment (e.g., ribbons, balls, clubs) to create rhythmic gymnastic sequences to music
- demonstrate ways to transfer weight, from feet to hands, at fast and slow speeds, using large extension (e.g., mule-kick, handstand, cartwheel)
- create and perform repeatable sequences (with a partner or in a small group) involving rolling and other skills (such as travelling, balancing, and weight transfers)
- balance in a symmetrical or asymmetrical shape on large gymnastics equipment (e.g., beams, tables, benches)
- balance on a variety of moving objects (e.g., balance boards, skates, scooters)
- set up apparatus that promote climbing, swinging, pulling, and hanging
- transfer gymnastics skills (e.g., balance) into other movement categories

Skill Development

- design and play small-group co-operative games
- perform an overhead volley using a lightweight ball back and forth with a partner across a medium-level net or rope
- strike a rebounding ball from a wall using forehand or backhand strokes, moving back to a ready position between strokes
- throw a variety of objects combining both accuracy and distance (e.g., Frisbees, deck tennis rings, footballs)
- explain and apply safety procedures in equipment handling and game play
- manipulate objects (e.g., kick, throw) using varied amounts of force, flow, and speed appropriate to the given situation
- pass and catch a ball while guarded by opponents
- explain why time and effort are prerequisites for skill improvement and fitness benefit

Science

General Curriculum Outcomes

STSE/Knowledge

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. (STSE)

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. (Knowledge)

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.

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: Diversity of Life

The Role of a Common Classification Scheme for Living Things

- identify different ways to classify living things in their local habitat, and select one (204-6)
- classify living things in the local habitat and create a chart or diagram that shows the method of classifying (206-1)
- present a selected classification scheme to others (207-2)
- describe how classifications may vary and suggest possible explanations for variations (104-5)
- identify communication problems that arise from the differences in classification schemes for living things and describe the role of a common classification system (206-9, 300-15)

The Animal Kingdom: Vertebrates and Invertebrates

- classify animals as vertebrates or invertebrates (104-8, 300-16)
- compare the characteristics of mammals, birds, reptiles, amphibians, and fish (300-17)
- record observations while investigating common arthropods (205-7)
- compare characteristics of common arthropods (300-18)
- classify invertebrates as arthropods or “other invertebrates” (206-1)

Microorganisms

- identify and use correctly appropriate tools to examine and describe some living things that cannot be seen with the naked eye (204-8, 300-19)
- describe how microorganisms meet their basic needs, including obtaining food, water, and air, and moving around (302-12)
- provide examples of how science and technology have been involved in identifying and controlling the growth of microorganisms (107-6)

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

- describe products and techniques that can be used at home to protect against unwanted microorganism growth (107-1)

Adaptions and Natural Selection

- propose questions about the relationship between the structural features of organisms and their environment, and use a variety of sources to gather information about this relationship (204-1, 205-8)
- compare the adaptations of closely related animals living in different parts of the world, and discuss reasons for any differences (310-15)
- describe reasons why various animals are endangered, and describe efforts to study their populations size and ensure their continued existence (105-1, 107-6)
- identify changes in animals over time, using fossils (301-16)
- identify the theory of natural selection as one that has developed based on the gradual accumulation of evidence (105-5)
- identify paleontologists as people who study fossils, and describe examples of improvements to some of their techniques and tools that have resulted in a better understanding of fossil discoveries (106-3, 107-11)

Physical Science: Electricity**Electrical Safety**

- use tools and apparatus such as batteries, bulbs, and wires in a manner that ensures personal safety and the safety of others (205-9)
- identify and explain the dangers of electricity at work or at play (303-31)
- describe examples of how our knowledge of the hazards of electrical shock has led to the development of electrical safety features (106-4)

Investigating Static Electricity

- record observations while exploring and solving static electricity challenges (205-7)
- suggest possible explanations for variations in the results of investigations involving static electricity (104-5, 206-3)

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

- use the terms attraction, repulsion, electrons, positive charge, and negative charge in meaningful contexts while exploring static electricity (204-4)

Circuit Pathways

- compare a variety of electrical pathways by constructing simple circuits, and illustrate the electrical circuits with drawings and appropriate symbols (303-23, 207-2)
- follow instructions for testing the conductivity of different solids and liquids, and draw conclusions as to which materials tested were insulators or conductors (205-3, 300-20)
- describe the role of switches in electrical circuits, and identify materials that can be used to make a switch (303-24, 204-8)
- compare characteristics of series and parallel circuits (303-25)
- compare the characteristics of static and current electricity (303-22)

Electromagnets and their Applications

- describe the relationship between electricity and magnetism when using an electromagnet (303-27)
- propose questions about the factors that affect the strength of electromagnets, state predictions, and hypotheses related to these factors, and carry out a fair test of these factors (204-1, 204-3, 205-1)
- describe how knowledge of electromagnets has led to the development of many electrical devices that use them (106-3)

Uses for Electricity

- demonstrate how electricity in circuits can produce light, heat, sound, motion, and magnetic effects (303-26)
- propose electrical circuitry problems to investigate, and plan a set of steps to solve them (204-1, 204-7)
- describe how knowledge of electricity has led to many new inventions that have changed the way we live, and describe ways in which we have become increasingly dependent on electricity over the years (107-9, 106-4)

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

Sources of Electricity

- describe how knowledge that magnets can produce electric current led to the invention of electrical generators (106-4)
- identify and investigate various methods of generating electricity (past, present, and future), and describe some ways in which these methods affect the environment (303-28, 105-3, 108-8)
- identify and explain sources of electricity as renewable or nonrenewable (303-29)

Electrical Energy Consumption and Conservation

- identify and explain different factors that could lead to a decrease in electrical energy consumption in the home and at school and how will this help protect the environment (108-5, 303-30)

Physical Science: Flight**Drag**

- rephrase questions about drag in a testable form and then carry out procedures, make and record observations to test the performance of a flying device (204-2, 205-5, 207-2)
- describe and demonstrate methods for altering drag in flying devices (301-18)
- describe how the results of similar and repeated investigations testing drag may vary and suggest possible explanations for variations (104-5)
- suggest improvements to the design of a flying device to improve its performance (206-6)
- provide examples of how technological research and design has resulted in many product designs that have reduced the amount of drag experienced (107-6)

Lift and Wing Shape

- describe the role of lift in overcoming gravity and enabling devices or living things to fly (303-32)
- plan and carry out a set of steps to investigate the effect of wing shape on lift, and select and use tools in building models of various wing shapes (204-7, 205-1, 205-2)

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

- demonstrate and describe how lift is affected by the shape of a surface (301-17)
- identify characteristics and adaptations that enable birds and insects to fly (300-21)
- describe how knowledge of how wing shape affects lift has led to the development of aerodynamically designed wings, and features on planes that allow wing shape to be altered during the flight (106-4)

Lift and Bernoulli's Principle

- identify situations which involve Bernoulli's principle (303-33)
- describe how aerodynamic research using wind tunnels and/or computers can contribute to new airplane designs (106-3)
- explain why using computer simulations and/or wind tunnels are appropriate processes for investigating wing and airplane designs (104-3)
- identify and use a variety of sources to investigate the use of wind tunnels in testing aircraft shapes (205-8)

Thrust and Propulsion

- describe and demonstrate the means of propulsion for flying devices (303-34)
- describe and justify the differences in design between aircraft and spacecraft (300-22)
- compare current and past air and space craft (105-3)
- describe some ways that flying devices have changed the way people work and live (107-9)
- provide examples of Canadians who have contributed to the science and technology of aircraft (107-12)

Earth and Space Science: Space**Space Exploration**

- describe how astronauts are able to meet their basic needs in space (301-21)
- provide examples of Canadians who have contributed to the science and technology of space exploration (107-12)
- describe examples of improvements to the tools and techniques of exploring the solar system that have led to discoveries and scientific information (106-3)

General Curriculum Outcomes **Specific Curriculum Outcomes**

Students will be expected to

- describe scientific/technological achievements in space science that are the results of contributions by people from around the world (107-15)
- identify examples of scientific questions and technological problems about space and space exploration that are currently being studied (105-1)

Relative Positions and Motion of the Earth, Moon, and Sun

- describe how peoples' conceptions of the Earth and its position in the solar system have been continually questioned and changed over time (105-6)
- demonstrate how Earth's rotation causes the day and night cycle and how Earth's revolution causes the yearly cycle of seasons (301-19)
- observe and explain how the relative positions of Earth, the moon, and the sun are responsible for the moon phases, eclipses, and tides (301-20)

The Solar System

- select and use tools in building models of the solar system that show approximate relative size of the planets and sun, and the approximate relative orbits of the planets around the sun (205-2)
- describe the physical characteristics of components of the solar system (104-8, 300-23)
- identify and use a variety of sources and technologies to gather pertinent information about a planet, moon, asteroid, or comet, and display their findings using diagrams, picture, and/or descriptions from recent explorations (105-1, 205-8, 207-2)
- evaluate the usefulness of different information sources when getting information about the components of the solar system (206-4, 204-6)

Stars and Constellations

- identify constellations from diagrams, pictures and/or representations of the night sky (302-13)
- use electronic, print resources and/or visit a planetarium to gather information on the visual characteristics and mythology of constellations (205-8)
- compare how different cultures have used the positions of stars for such things as the appropriate time to plant and harvest crops, navigate the oceans, and/or foretell significant events (107-3)

Social Studies

General Curriculum Outcomes

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.

Culture and Diversity

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.

Individuals, Societies, and Economic Decisions

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

Interdependence

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.

People, Place, and Environment

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

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.

Specific Curriculum Outcomes

NOTE: It is not intended that all units in the draft curriculum will be done, rather only the introduction and summative will be compulsory, then there will be a choice of units. The number of units will be determined through the pilot process.

The specific curriculum outcomes for social studies listed below are draft outcomes, as of September 2003, developed through APEF. They are provided for your information only. Until this new curriculum is field-tested, piloted, and implemented, the current curriculum is to be followed.

Conceptual Organizer: World Cultures

Students will be expected to

Unit One: Introduction: World Cultures

- 6.1.1 explore their concept of culture and demonstrate an understanding of culture in their lives
- 6.1.2 identify, locate, and map the major cultural regions of the world
- 6.1.3 recognize the importance of cross-cultural understanding
- 6.1.4 identify and explain factors that are creating a more global culture around the world

Unit Two: Environment

- 6.2.1 demonstrate an understanding of the influence of climate and vegetation on selected regions of the world
- 6.2.2 for a selected cultural region, assess the relationship between the culture and the environment
- 6.2.3 compare and contrast the use of resources and sustainability practices between Canada and a selected country (selected countries)

Unit Three: Cultural Influences

- 6.3.1 for a selected cultural region, describe how traditions influence its culture
- 6.3.2 for a selected country, describe how its government influences its culture
- 6.3.3 describe how economics influences culture

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

Unit Four: Expressions of Culture

- 6.4.1 for a selected cultural region, describe how the arts reflect their traditional values and beliefs
- 6.4.2 for the selected cultural region, explain the importance of literature and language as expressions of culture
- 6.4.3 for the selected cultural region, explore the extent to which sports and games are expressions of culture

Unit Five: Global Issues

- 6.5.1 demonstrate an understanding of the effects of the uneven distribution of wealth around the world
- 6.5.2 identify and describe examples of human rights issues around the world
- 6.5.3 take age-appropriate actions to demonstrate their responsibilities as global citizens

Unit Six: Summative: Canada—A Multicultural and Multiracial Mosaic

- 6.6.1 demonstrate an understanding of how cultures from around the world have participated in the development of Canadian culture

Visual Arts

General Curriculum Outcomes Specific Curriculum Outcomes

Students will be expected to

Making

GCO 1: Students will explore and manipulate a range of materials, demonstrating an ability to express themselves.

1.1.1 express through art-making an awareness of the complexities of the world and their role in it

1.2.1 demonstrate competency and initiative in the use of techniques, technologies, materials, and equipment

1.3.1 use a combination of visual elements and principles of art and design in art-making

GCO 2: Students will use a range of independent and collaborative art-making strategies.

2.1.1 work independently and collaboratively to apply learned skills, solve complex problems, and respond to experiences and ideas

Looking

GCO 3: Students will examine a broad range of artworks through time and cultures.

3.1.1 recognize and respond to a variety of art forms

3.2.1 compare works of art across time and culture

3.3.1 demonstrate an awareness of artists' styles, intentions and approaches

3.4.1 use technology to locate and explore works of art

GCO 4: Students will interact with sensitivity to and respect for their own artwork and that of others.

4.1.1 discuss ideas and approaches with sensitivity and respect

4.2.1 show appreciation of individual differences in artwork

4.3.1 demonstrate that there are many ways of perceiving and knowing

Reflecting

GCO 5: Students will bring personal meaning to artwork and communicate their discoveries.

5.1.1 express ideas and points of view through their artwork

5.2.1 demonstrate the ability to articulate their responses to works of art

5.3.1 demonstrate an understanding of the lives of artists within cultural/historical/social contexts

General Curriculum Outcomes Specific Curriculum Outcomes

GCO 6: Students will demonstrate an awareness and appreciation of art as a lifelong process.

Students will be expected to

- 6.1.1 demonstrate a sensitivity towards the natural and built environment through their artwork
- 6.2.1 examine the role of the media and discuss their effects on their lives and the lives of others
- 6.3.1 describe and value the role of art and artists in their local communities