Middle School

Prioritized Learning Outcomes for the 2020-2021 School Year

Middle School is a time for learners to develop identity and purpose, to use learning to improve the world, and to begin to plan for the future. New Brunswick's Portrait of a Learner "identifies the competencies and attitudes learners need to develop through educational and life experiences," including the valuing of diverse peoples and ideas, reconciliation with Indigenous peoples, and equity among all people.

As such, Middle School curriculum aims to help learners:

- form healthy relationships with self and others;
- be curious, ask challenging questions, find out answers, and become informed; and
- practice empathy and take action to make their communities better.

The curriculum for Grades 6 – 8 has been reviewed with the overarching vision of the Portrait of a Learner, the recognition that this school year will be unique, and with the understanding that the priority will remain the well-being of students and staff, while students and educators renew focus on necessary academic learning.

This document contains prioritized learning outcomes for this school year that have been considered across subject areas and situated in the NB Global Competencies. The intention is to provide a full picture of a reasonable number of learning expectations per grade level so teachers, may examine all that is to be learned by the student, make cross-curricular connections and plan opportunities for learning.

The prioritized outcomes in this document are recommended as the focus for the 2020-2021 school year. Efforts have been made to word expectations in straight-forward language, and duplication or repetition within and across subject areas have been removed (e.g., Personal Wellness combines Health and PDCP). The prioritized outcomes for each of the grades must be applied with the knowledge of where students are at; therefore, formative assessments at the start of the school year will be an important indicator for teachers in their planning.

The information in this document is meant to provide teachers and students time to adjust to the numerous changes they have experienced. It is not a permanent replacement for the existing curricula. If helpful, teachers may refer to the full curriculum guides, in English and French, for information and suggestions about teaching and learning. Collaboratively, with their own pedagogical knowledge and that of their colleagues, teachers can use this document to facilitate planning for this school year.

Recommended instructional practices include, but are not limited to:

- time to build relationships that foster and affirm identities.
- time to acknowledge and process the major events and changes that have happened since March 2020.
- regular use of the assessment cycle (of, for, and as learning) to support capable learners who know where they are, where they are going, and how to plan with their teachers to improve.
- engaging with real-life topics, meaningful to adolescents, that build skills, knowledge and competencies in an interconnected way across curricular areas.
- the intentional teaching of vocabulary, through consistent processes, which builds key concepts across subject areas, supports language learners, and strengthens comprehension and chances for transfer to new learning (e.g., the term variable is a key concept to learning across subjects in Grade 6).

Language Learners

Language acquisition develops best if supported intentionally in every subject area. Using scaffolds like subject-area word walls, graphic organizers, visuals, realia, and sentence frames benefit *all* students, while providing connections to content for language learners

NB Global Competencies

Middle School is a time for learners to develop identity and purpose, to use learning to improve the world, and to begin to plan for the future. New Brunswick's Portrait of a Learner "identifies the competencies and attitudes learners need to develop through educational and life experiences," including the valuing of diverse peoples and ideas, reconciliation with Indigenous peoples, and equity among all people.

For descriptions, indicators and exemplar "I" statements for each of the global competencies, please see:

- Collaboration
- Communication
- Critical Thinking and Problem-Solving
- Innovation, Creativity, and Entrepreneurship
- Self-Awareness and Self-Management
- Sustainability and Global Citizenship

FOUNDATIONAL SKILLS: LITERACY AND NUMERACY, AND CORE LEARNING IN SUBJECT AREAS

First Nation Perspectives

Finally, as we adapt to our changing times, we do not want to lose sight of our commitments to the Truth and Reconciliation Commission of Canada's Calls to Action; that, all New Brunswick learners should develop an understanding of the impact of Indian Residential and Day Schools, and an appreciation for First Nation cultures, histories, and worldviews. Objective 6 in the Ten-Year Education Plan commits us to ensure that First Nation languages and cultures are reflected in the curriculum and that the treaty relationship is understood and celebrated.

Supplemental modules for English Language Arts, Visual Arts and Social Studies have been developed to assist educators in meeting these commitments and these resources will be helpful in the year ahead. As well, Indigenous content has a place in all subject areas and wherever possible educators are encouraged to include local Wabanaki content.

Personal Wellness

6

Students become more connected to their peers and the world around them. They learn what influences them, how relationships change over time and how to plan for their own health. This includes developing their identity through explorations of themselves, their personal purpose and their future plans.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Care of self, family, and community

- Describe various environmental factors that affect health and health choices.
- Apply strategies for personal wellness using the seven wellness domains.
- Demonstrate knowledge of and respect for all people, diverse cultures, including Wabanaki.

Examine the use, misuse, and abuse of self, substances and media

- Explain the use, misuse and abuse of substances and media which may impact mental and physical well-being.
- Demonstrate knowledge of addictive behaviours and factors that contribute to addictions.

Demonstrate an understanding of their growth and development (taught in English to all students)

- Accept, respect, and understand self and others.
- Demonstrate competencies that maintain healthy interpersonal relationships.
- Summarize the changes that occur in the body during puberty.
- Explain the structures and functions of human reproductive systems.
- Explore how sexuality is an expression of self and behavior in relationships.

Develop a statement of purpose and supporting life goals

- Identify skills and attitudes needed to pursue career pathways.
- Demonstrate personal qualities, strengths and competencies in relation to career pathways.
- Explore personal life roles and the importance of work/life balance.

Cross-Curricular Suggestions

The **Personal Wellness** outcomes connect to:

- cyber safety and digital citizenship (Technology)
- understanding that texts influence the idea of self, others and the world (Language Arts)
- the presentation of data (Mathematics)
- understanding human rights and forces that shape our world view (Social Studies)
- set and modify goals to maintain a healthy lifestyle (Physical Education)
- the classification of living things (Science)

English Language Arts

6

Students listen to, view, read and discuss texts for enjoyment and learning. They speak, write and represent a variety of well-crafted texts. They understand texts have purpose, and this is related directly to audience. They develop their ability to communicate as they learn about self, others, community and the world. They are learning to think about language systematically. Classroom discussion is modelled and respected as a mode for growing learning.

Build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts, representing all voices

- Use word structures, syntax, vocabulary, fluency, visuals, text features and links to create meaning, to locate topics, and to obtain or verify understanding of information.
- Use and integrate various strategies to make meaning of a variety of texts.

Respond personally and critically to the works of authors, creators, illustrators, and speakers

- Support personal opinions about a range of texts by making connections.
- Apply strategies to analyze texts, with sensitivity, for: purpose and point of view of the text creator; language used to manipulate, persuade, or control; the presence of opinion, prejudice, bias, and stereotyping.

Speak, write and represent to learn about self, others, and the world

- Ask and respond to questions to seek clarification or explanation of ideas and concepts.
- Explain and support ideas and opinions.
- Use strategies to find and support answers; generate topics of personal interest; and reflect, compare, and record ideas, attitudes, opinions, and experiences of self and others.

Create texts, collaboratively and independently, for specific audiences and purposes

- Make choices for a variety of purposes and audiences (e.g., modes, form, conventions, style, content).
- Select from range of pre-writing, drafting, revising, editing and proofreading strategies to craft texts; revise drafts from a reader's/viewer's/listener's point of view.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Language Learners

Writing is generally the last language skill to develop; therefore, language learners at the A1 and A2 levels of the CEFR may need to meet their outcomes through other forms of representation, while developing their writing skills.

French Immersion Language Arts

(Grade 3 Entry to Immersion)

6

French Immersion students use their second language to learn and interact throughout the day. Through this application of language and specific language instruction they develop language competence. French Immersion Language Arts teaches the language to support learning in all subject areas and promotes active engagement in New Brunswick and Canadian culture.

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to understand the essential message in simple texts that contain familiar language about common and/or unpredictable situations.

Produce a message according to the context and intention of communication

- Use language functions and acquired vocabulary to respond to a variety of academic and social situations.
- Communicate and present information in a variety of contexts by expressing ideas, asking questions, sharing feelings and opinions (with justifications).
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use language functions and vocabulary to respond to social interactions.
- Participate in conversations relating to common and sometimes unpredictable situations, with support when needed.
- Use technology to facilitate communication and interaction in authentic situations.

Select and read a variety of texts

- Use comprehension strategies to make meaning of texts (literal, inferential and evaluative).
- Use learned strategies to read with accuracy and expand vocabulary.
- Select and read independently a variety of fiction and nonfiction texts.
- Find elements of the French culture in texts containing familiar language (e.g., cultural references, word choice, regional situation).

Write texts according to the intention and audience

- Write a variety of coherent texts on different topics (e.g., academic, researched or of interest) using familiar language.
- Write texts by following the process of writing using exemplars/models.
- Write texts by applying the six writing traits using exemplars/models.
- Use elements of French culture in texts.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Grade 3 entry FI will reach the A2.2 proficiency level as described on the Common European Framework of Reference (CEFR).
See Appendix A: Language Targets for French Programs.

French Immersion Language Arts

(Grade 6 Entry to Immersion)

6

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to find key information in messages and short, simple texts, slowly and clearly articulated that contain familiar language about common situations.

Subject area association with NB Global Competencies — SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Produce a message according to the context and intention of communication

- Use language functions and acquired vocabulary to respond to common situations at school.
- Communicate information and present in familiar contexts by expressing ideas and sharing feelings and opinions (with simple justifications).
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use language functions and vocabulary to respond to social interactions by exploring the language.
- Participate, with support, in conversations relating to familiar situations.
- Use technology to facilitate communication and interaction in authentic situations.

Select and read a variety of texts

- Use comprehension strategies to make meaning of texts (literal, inferential and evaluative).
- Use learned strategies to read with accuracy and to expand vocabulary.
- Find, with support, key elements of the French culture in simple texts containing very familiar language (e.g., cultural references, word choice, and regional situation).

Write texts according to the intention and audience

- Write simple texts by following the process of writing using exemplars/ models.
- Write simple texts by applying the six writing traits using exemplars/ models.
- Use elements of French culture in texts.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Grade 6 entry FI will reach the A2.1 proficiency level as described on the Common European Framework of Reference (CEFR).

See Appendix A: Language Targets for French Programs.

Social Studies

6

Drawing on a growing understanding of pluriculturalism, students will use various information sources to learn about culture by employing civic practices, historical thinking and geographical thinking. See Appendix B: Processes for Learning in Social Studies.

Develop a concept of culture

- Explore how the elements of worldview and culture influence identity (personal, community, cultural).
- Identify how culture is expressed and sustained, including: language, religion, location and place, shared traditions, histories, customs and rituals, sports and games, the arts and literature.
- Demonstrate an understanding of culture in their own lives.

> Pluriculturalism is "the mediation of different cultures in the construction of a person's or community's cultural identity."

Examine the importance of cross-cultural understanding

- Explain the concept of a stereotype.
- Explore how mass media stereotypes different cultural groups.
- Point out examples of actions taken to improve cross-cultural understanding (local, national, global).

Take action to demonstrate understanding of rights and responsibilities as Canadian and global citizens

- Examine selected examples of human rights issues around the world, including issues involving rights outlined in the United Nations Declaration of the Rights of the Child; issues involving rights outlined in the United Nations Universal Declaration of Human Rights; and issues involving rights outlined in the United Nations Declaration on the Rights of Indigenous Peoples.
- Examine the struggles for citizenship and human rights of cultural groups in Canada and New Brunswick, past and present {e.g., cultural restrictions imposed on First Nations peoples—the Potlatch Ban, the Giveaway Ceremony, and the Mawio'mi (powwow)}.
- Consider perspectives on a local/national/international issue and support a position.

Cross-Curricular Suggestions

The **Social Studies** outcomes connect to:

- demonstrate an ability to cooperate with others (Physical Education)
- communicating ideas and information using a variety of multimedia (Technology)
- adapt or examine art to understand personal life experiences and events in the past and present (Visual Arts)
- use and integrate various strategies to make meaning of a variety of texts (Language Arts)

Post Intensive French

6

Students will learn to initiate and maintain predictable face-to-face conversations and satisfy limited social demands with some spontaneity in language production. Learning a second language develops intercultural and pluricultural competencies and promotes active engagement in New Brunswick and Canadian culture.

Develop oral communication (listening, oral production and interaction)

- Ask for and provide information on a number of topics.
- Provide and compare information.
- Provide descriptions relating to persons, objects, places or events.
- Provide arguments for and against a topic.
- Provide a narration with respect to an event in their lives.

Read and view to develop second language

- Become familiar with the structure of an informative text.
- Comprehend and interpret a variety of short texts on unfamiliar topics in guided situations.
- View and respond to a variety of simple representations and media in the school context.

Write and represent to develop second language

- Provide information on a number of topics.
- Compare information.
- Describe persons, objects, places or events.
- Present arguments for and against a topic in bullet form.
- Write about an event in their lives.

The goals and experiences in French Second Language learning in Grade 6 will help students reach the A2.1 proficiency level as described on the Common European Framework of Reference (CEFR). See Appendix A: Language Targets for French Programs.

Cross-Curricular Suggestions

Development of language competencies are interrelated. In Post Intensive French, this is achieved through the exploration of themes (usually four per school year). A thematic approach contextualizes language to build confidence and competence.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Mathematics

6

Math learners will build more formal math language. They will apply skills and concepts to make predictions and express unknown variables. Learning in Grade 6 Math supports the development of computational thinking and will provide a foundation for complex problem solving, financial literacy, and job-related expectations.

Number Sense: developed through the natural connections of numbers to experiences and the use of benchmarks and referents

- Describe ratio, percent, and integers concretely, pictorially, and symbolically.
- Solve problems involving ratios and percentages.
- Solve problems that involve the multiplication and division of decimals.

Patterns and Relations: learn to recognize and use mathematical patterns that can be represented in a variety of ways including algebraic expressions

- Solve problems to demonstrate an understanding of the relationship within tables of values, within graphs, and between table of values and graphs.
- Represent patterns using equations with letter variable and explain the meaning of preservation of equality concretely, pictorially and symbolically.

Shape and Space

- Identify examples of angles in the environment: estimate, measure, and label by referencing 45°, 90° and 180°.
- Demonstrate that the sum of interior angles is 180° in a triangle and 360° in a quadrilateral.
- Develop and apply a formula for determining the perimeter of polygons, area of rectangles, and volume of right rectangular prisms.

Statistics and Probability: collect, display and analyze data

- Justify and use appropriate methods of collecting data, graph data, and analyze the graph to solve problems.

There may be a misconception that Math is a "universal language." Thus, to equitably assess language learners in Math, ample opportunities to learn and use math vocabulary must be part of instruction (e.g., visual cues, key vocabulary, structured conversation, etc.).

Cross-Curricular Suggestions

The **Mathematics** outcomes connect to:

- body metrics and skills analysis (Physical Education)
- text features used in Mathematics texts (Language Arts)
- formulas used to calculate principles of flight (Science)
- tables of values, and graphs, as used when examining the similarities and differences found in various Human Rights documents (Social Studies)
- the clarification or explanation of ideas and concepts (Language Arts) and the development of geographical thinking (Social Studies)

Science

6

Exploring diversity of life introduces students to the variety of life forms available for observation. By making comparisons, they notice important features that are common and those which distinguish an organism. Formal classification is more important in later grades but developing a system to organize the variety of organisms studied is an important feature of this learning.

Building on this learning leads naturally to investigations of flight. Exploration and study of aerodynamic features of flight-enabled animals (e.g., bats, birds, dragonflies, butterflies, etc.) highlight the connection between engineering and design in the natural world and technology. Diversity and flight provide the contexts for learning the key scientific concepts through science inquiry.

Key Concepts

- Characteristics of vertebrates
- Comparison of features of organisms
- Classification of living things
- Principles of flight

Students will use the following scientific processes and skills in their investigations:

Initiate and Plan

- Ask questions about phenomenon that lead to a fair test or brainstorm a practical technological problem.
- Consider appropriate variables (dependent, independent and control) to formulate a hypothesis.
- Choose appropriate materials and equipment for an investigation.
- Describe the investigation procedures for a fair test or a solution to a practical problem.

Perform and Record

- Conduct appropriate investigation to test hypothesis or solution to a problem.
- Use tools and equipment appropriately in an investigation.
- Record observations (qualitative data) and/or measurements (quantitative data).
- Develop a model to predict and/or describe a phenomenon.

Analyze and Explain

This stage of the process is most directly related to numeracy.

- Organize tables and graphical displays.
- Construct graphical displays of data.
- Classify objects and events.
- Obtain information from sources and/or other reliable media to support results.
- Use data (evidence) to confirm or refute the hypothesis or initial problem.

Communicate and Collaborate

This stage of the process is most directly related to English Language Arts.

- Use appropriate science vocabulary, numeric and symbol systems to share understandings.
- Discuss ideas and contributions of others to ideas and contributions of others.
- Communicate ideas using a variety of modes e.g., digital technologies models, and simple reports.
- Present ideas in a clear and logical order.

Cross-Curricular Suggestions

The **Science** outcomes connect to:

- create texts, collaboratively and independently, for specific audiences and purposes (Language Arts)
- text features used in Science texts (Language Arts)
- shape and space (Mathematics)
- statistics and probability (Mathematics)
- follow rules, routines and procedures of safety in a variety of activities and facilities (Physical Education)

Students will apply sustainable practices in their scientific investigations and in their communities. They will:

- Follow guidelines for safe use of equipment to conduct a scientific experiment.
- Follow safety guidelines for safe use of tools to build a prototype of a solution.
- Use science knowledge when considering issues of concern to them.
- Reflect on various aspects of an issue and make decisions about possible actions.

See Appendix C: Scientific Skills and Process.

6 Information Communication and Applied Technology

Students will use design process to produce solutions and create products. They will develop their knowledge and understanding of digital systems and data and will improve their computational thinking. The outcomes remain the same across grades 6, 7 and 8. However, the complexity level of projects and the level of the interaction with technology will increase as the cross curricular content changes throughout the grades.

Understand technological operations and concepts

- Consistently demonstrate safe use of and care for tools and technology applications.
- Conceptualize, design, and create products to standards and specifications.
- Communicate information and ideas using a variety of multimedia.

Practice critical thinking and problem-solving skills

- Work in teams to solve problems.
- Examine data, draw conclusions, and recommend solutions to improve performance.
- Demonstrate computer coding/programming concepts and terminology.

Practice responsible citizenship

- Examine current issues related to technology.
- Interact, collaborate, and publish using technology and respect the Copyright Act.
- Understand the concept of and demonstrate appropriate decision making with regards to “Digital Footprint”.
- Practice safe, legal, and ethical use of technology.

Learning in Information Communication and Applied Technology supports learning in all other curricular areas.

Projects that develop outcomes in technology often connect to learnings in Math and provide opportunities to apply concepts and highlight how math is useful in life.

Responsible citizenship outcomes connect to learning in Personal Wellness, Social Studies and Language Arts and provide opportunities for reinforcing learning and investigations of issues important to adolescents.

Specific Cross-Curricular Suggestions

- The Information Communication and Applied Technology outcomes connect to:
- use a variety of media, make and show increasingly complex artwork (Visual Arts)
- create increasingly complex melodies (Music)
- combine and refine locomotor and non-locomotor skills (Physical Education)
- classification of living things (Science)

Visual Art

6

Through the visual arts, students will continue to develop their skills and strategies to create and understand the world. They will learn awareness, appreciation, and understanding of personal life experiences and events in the past and present.

Create and express visual ideas

- Using a variety of media, make and show increasingly complex artwork which include elements (the 'what') and principles of art (the 'how'). Elements may include line, colour, shape, form, space, value, and texture. Principles may include balance, variety, unity, repetition, pattern, hierarchy, proportion, scale, emphasis, contrast, movement, rhythm, proximity, and alignment.
- Adapt artwork for a specific purpose or message.

Evaluate self, peer and public showings

- Distinguish elements, principles, genres and stylistic characteristics of visual art.
- Demonstrate, through multiple means of expression, understanding of visual art which may include drawing, painting, printmaking (stencil, stamp, relief printing, etc.), mixed media (collage, assemblage of natural materials, etc.), and three-dimensional (sculpture, clay, papier maché, etc.).

Use critical viewing to distinguish and respond to elements of visual art

- Construct critical awareness for the value of visual art in history and culture.
- Describe stylistic characteristics across historical eras and from diverse cultures including local examples.

Cross-Curricular Suggestions

The **Visual Art** outcomes connect to:

- comparison of features of organisms (e.g., how humans experience light) (Science)
- how culture is expressed (Social Studies)
- connections to self, others and the world (Language Arts)
- personal influences (Personal Wellness).

Music

6

While being engaged in music activities, students learn more than music content and skills. As with any creative endeavour, many thought processes, learning strategies, and ways of expression are refined and transferred to other aspects of life. Like other art forms, music offers unique experiences from which a better understanding of the world can emerge. Students who are engaged in music can develop a comprehensive awareness, appreciation, and understanding of personal life experiences and events.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

The performance of music is an integral part of any comprehensive music program. Teachers must continually work at balancing the delivery of the music program between performance and non-performance learning activities.

Compose and express musical ideas

- Create, rehearse, and sing/play increasingly complex melodies (minor scale, sub-dominant and sub-mediant) and rhythms (6/8 time signature) in a variety of ways.

New melodies:

- Minor Scale
- Sub-Dominant
- Sub-Mediant

New rhythms:

6/8 Time signature

- Evaluate self, peer and public performance.

Use active listening to distinguish and respond to the elements of music

- Distinguish elements of music (melody, harmony, beat, rhythm, dynamics, tempo, timbre, texture, articulation, etc.), structural devices (theme and variation, traditional and invented, and simple chord progression), and multiple genres.
- Demonstrate understanding through multiple means of expression (singing, playing composing, etc.).

Construct critical awareness for the value of music in history and culture

- Express the purpose and function of music in history and culture.
- Examine the role of music in historical eras and from diverse cultures including local examples.

Cross-Curricular Suggestions

The **Music** outcomes connect to:

- build understanding by listening (Language Arts)
- produce a message according to the context and intention of communication (Language Arts)
- number sense (Mathematics)

Physical Education

6

Students develop more complex movements, learn to set and meet personal fitness goals, and develop enjoyment of movement, cooperation, responsibility, and respect through games, challenges, and sport.

Demonstrate efficient and effective movement skills and concepts, a functional level of activity specific motor skills, and efficient and effective body mechanics

- Combine and refine locomotor and non-locomotor skills into movement alone and with others and in a variety of alternative environments.
- Move rhythmically/creatively with variations of body awareness, space awareness, qualities and relationships.
- Receive, retain, and send an object with increasing accuracy, individually and with others, and while using an implement.

Demonstrate personal functional level of physical fitness through participation in physical activity

- Set and modify goals to develop personal fitness to maintain a healthy lifestyle and to improve performance.
- Follow rules, routines, and procedures of safety in a variety of activities and facilities.
- Identify basic, sport-specific concepts in relation to body mechanics and skill analysis.

Demonstrate an ability to cooperate with others (within the parameters of physical distancing)

- Demonstrate fair play, etiquette, self-confidence and responsibility while participating in a variety of physical activity.
- Participate cooperatively in modified games with others of various abilities, interests and diverse cultural backgrounds.
- Explain the enjoyment gained from being physically active.

Cross-Curricular Suggestions

The **Physical Education** outcomes connect to:

- think critically and solve problems (Technology)
- speak to learn about self and others (Language Arts)
- ratio and percent (Mathematics)
- musical ideas (Music)
- comparison of features of organisms (Science)

Personal Wellness

7

Students become more connected to their peers and the world around them. They examine influences, learn how to improve interpersonal relationships and how to refine plans for their own health. This includes developing their identity through explorations of themselves, their personal purpose and their future plans.

Care of self, family, and community

- Describe various environmental factors that affect health and health choices.
- Apply strategies for promoting personal wellness, safety, and injury prevention.
- Examine how respect for all people and diverse cultures, including Wabanaki, improves personal wellness.

Examine the use, misuse, and abuse of self, substances and media

- Identify the negative effects of alcohol, drugs, media and technology.
- Practice refusal skills to promote healthy decision making.
- Analyze the influences of peers and media/advertising that impact choices.

Demonstrate an understanding of their growth and development (taught in English to all students)

- Accept, respect, and understand self and others.
- Practice competencies that maintain healthy interpersonal relationships.
- Review the structures and functions of human reproductive systems.
- Describe fertilization, pregnancy, and childbirth.
- Explore how sexuality is an expression of self and behavior in relationships.

Develop a statement of purpose and supporting life goals

- Develop the skills and attitudes needed to pursue career pathways.
- Develop personal qualities, strengths and competencies in relation to career pathways.
- Recognize personal life roles and the importance of work/life balance.

Cross-Curricular Suggestions

The **Personal Wellness** outcomes connect to:

- understand of central tendency and range (Mathematics)
- how power and authority influence lives (Social Studies)
- cooperative games that are meaningful to students of various abilities, interests, and diverse backgrounds (Physical Education)
- the importance of art for both individuals and societies (Visual Arts)

English Language Arts

7

Students listen to, view, read and discuss texts for enjoyment and learning. They speak, write and represent a variety of well-crafted texts. They understand texts have purpose, and this is related directly to audience. They develop their ability to communicate as they learn about self, others, community and the world. They are learning to think about language systematically. Classroom discussion is modelled and respected as a mode for growing learning.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts, representing all voices

- Demonstrate an awareness of how text creators use word structures, syntax, vocabulary, fluency, text features and links to create meaning and to achieve their purposes; use those devices to construct meaning and enhance understanding.
- Recognize, articulate, and apply processes/strategies used by listeners/readers/viewers and self to make meaning of increasingly complex texts.
- Use a variety of sources to access and select information.

Respond personally and critically to the works of authors, creators, illustrators, and speakers

- Support personal opinions about a range of texts by providing explanations, examples, and supporting arguments.
- Critically analyze texts for portrayal of cultures; personal knowledge, ideas, values, perceptions, and points of view; and how form, structure, and context contribute to meaning making.

Speak, write and represent to learn about self, others, and the world

- Know how and when to ask questions that call for elaboration and clarification.
- Express and support a personal point of view, with sensitivity.
- Experiment with strategies to extend and explore learning; reflect on their own and other's ideas; and identify problems and solutions.

Create texts, collaboratively and independently, for specific audiences and purposes

- Recognize that a creator's choice of form is influenced by their voice (e.g., identity, culture), purpose (e.g., entertain, inform, request, record, describe) and audience.
- Use specific pre-writing, drafting, revising, editing and proofreading strategies to craft texts that influence listener's/reader's/viewer's experience.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Language Learners

Writing is generally the last language skill to develop; therefore, language learners at the A1 and A2 levels of the CEFR may need to meet their outcomes through other forms of representation, while developing their writing skills.

French Immersion Language Arts

(Grade 3 Entry to Immersion)

7

French Immersion students use their second language to learn and interact throughout the day. Through this application of language and specific language instruction they develop language competence. French Immersion Language Arts teaches the language to support learning in all subject areas and promotes active engagement in New Brunswick and Canadian culture.

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to understand the essential message in texts that contain familiar or non-familiar language in a variety of situations.

Produce a message according to the context and intention of communication

- Use appropriate language functions and vocabulary to respond to academic and social situations.
- Communicate and present information in a variety of contexts by expressing ideas, asking questions, sharing feelings and opinions with justifications.
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use appropriate language functions and vocabulary to respond to social interactions.
- Participate in conversations relating to common and sometimes unpredictable situations with minimal support.
- Use technology to facilitate communication and interaction in authentic situations.

Select and read, independently, a variety of fiction and nonfiction texts

- Use strategies to read with accuracy and fluency, expand vocabulary and to make meaning of texts (literal, inferential and evaluative).
- Find elements of the French culture in texts containing familiar language (e.g., cultural references, word choice, regional situation).

Write texts according to the intention and audience

- Write a variety of coherent texts on different topics (academic, researched, or of interest) by following the process of writing, applying the six writing traits, and using exemplars/models.
- Use elements of French culture in texts.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Grade 7 students (Grade 3 Entry) will work within the B1.1 proficiency level as described on the Common European Framework of Reference (CEFR) in oral and reading components, and A2.2 in writing. See Appendix A: Language Targets for French Programs.

French Immersion Language Arts

(Grade 6 Entry to Immersion)

7

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to understand the essential message in simple, clearly articulated texts, that contain familiar language about common and sometimes unpredictable situations.

Subject area association with NB Global Competencies — SOME STRONG

Produce a message according to the context and intention of communication

- Use language functions and vocabulary to respond to a variety of academic and social situations.
- Communicate and present information in a variety of contexts by expressing ideas, asking questions, sharing feelings and opinions (with simple justifications).
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use language functions and vocabulary to respond to social interactions.
- Participate in interactions relating to common and sometimes unpredictable situations, with support.
- Use technology to facilitate communication and interaction in authentic situations.

Select and read independently a variety of fiction and nonfiction texts.

- Use strategies to read with accuracy and fluency, expand vocabulary and to make meaning from simple texts (literal, inferential and evaluative).
- Find, with support, key elements of the French culture in simple texts containing very familiar language (e.g., cultural references, word choice, regional situation).

Write texts according to the intention and audience

- Write texts on familiar and/or studied topics.
- Write simple texts by following the process of writing, applying the six writing traits and using exemplars/models.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Grade 7 FI students (Grade 6 entry) will work within the A2.2 proficiency level as described on the Common European Framework of Reference (CEFR) in oral components, and A2.1 in reading and writing components. See Appendix A: Language Targets for French Programs.

Social Studies

7

Students will explore empowerment by investigating authority in the lives of Canadian citizens, both today and in the past, and considering how power and privilege are, and have been, distributed in society. Students will use civic practices, historical and geographic thinking to explore empowerment. See Appendix B: Processes for Learning in Social Studies.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Develop a concept of empowerment

- Define power and authority.
- Explain how power and authority influences their lives and the lives of others.

Analyze how political systems can empower or disempower

- Evaluate the living conditions for peoples living in British North America in the mid 1800s, including Indigenous peoples, African-Canadians, and Acadians.
- Determine the effect of responsible government on the empowerment of these groups.

Empowerment involves having the means, opportunity, power or authority to be self-assertive and independent, and to act.

Take action to demonstrate understanding of social, political or cultural issues facing youth today

- Examine selected examples of empowerment and disempowerment in Canada, including the key factors and outcomes of the Red River Resistance and the Northwest Resistance, and the experiences of Indigenous peoples in Atlantic Canada pre- and post- Confederation, including the role of treaties, national policies, and the Indian Act.
- Research the experiences of empowerment and disempowerment of cultural groups immigrating to Canada between 1870 and 1914.
- Examine the development of labour rights, women's rights and social reform movements in the late 19th and early 20th centuries.
- Consider perspectives on a local/national/international issue and support a position.

Cross-Curricular Suggestions

The **Social Studies** outcomes connect to:

- set and develop goals to maintain a healthy lifestyle and to improve performance (Physical Education)
- identify the sample space for a probability experiment involving two independent events and determine the theoretical probability (Mathematics)
- adapt or examine art to understand personal life experiences and events in the past and present (Visual Arts)
- use and integrate various strategies to make meaning of a variety of texts (Language Arts)

Post Intensive French

7

Students will learn to initiate and maintain predictable face-to-face conversations and satisfy limited social demands with some spontaneity in language production. Learning a second language develops intercultural and pluricultural competencies and promotes active engagement in New Brunswick and Canadian culture.

Develop oral communication (listening, oral production and interaction)

- Compare information on a number of topics and provide a judgement.
- Describe the impact of choices with respect to their lives.
- Discuss the effects of advertising on their lives.
- Discuss their hopes for the future.

Read and view to develop second language

- Assess an advertisement or other publicity message.
- Compare and contrast the content and the format of articles written for a teen magazine and a magazine for adults.
- Read age-appropriate texts of fiction in guided situations.
- View and respond to a variety of representations and media in the context of community.

Write and represent to develop second language

- Present information on a number of topics.
- Produce an opinion piece.
- Describe the impact of a choice they have made with respect to their own life.
- Create a publicity brochure or an advertisement.
- Provide details in writing about the negative aspects of a piece of advertising.

The goals and experiences in French Second Language learning in Grade 7 will help students round out their capacity at the A2.1 proficiency level and start to develop capacity at A2.2 as described in the Common European Framework of Reference (CEFR). See Appendix A: Language Targets for French Programs.

Cross-Curricular Suggestions

Development of language competencies are interrelated. In Post Intensive French, this is achieved through the exploration of themes (usually four per school year). A thematic approach contextualizes language to build confidence and competence.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Mathematics

7

Math learners will build more formal math language. They will make predictions and solve unknown variables. Learning in Grade 7 Math supports the development of proportional and algebraic thinking which will provide a foundation for complex problem solving, financial literacy, and job-related expectations.

Number Sense: developed through connections of numbers to experiences and by representing proportional thinking multiple ways

- Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals to solve problems.
- Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, concretely, pictorially and symbolically.
- Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially and symbolically.

Patterns and Relations: graph and analyze mathematical patterns and model linear equations to solve problems

- Create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems.
- Model and solve problems that can be represented by linear equations, concretely, pictorially and symbolically.

Shape and Space: use measurement and apply formulae derived from characteristics of 2-D shapes

- Demonstrate an understanding of circles by describing the relationships among radius, diameter and circumference of circles, and relating circumference to pi.
- Develop and apply a formula for determining the area of triangles, parallelograms, and circles.
- Identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs.

Statistics and Probability: determine measures of data and determine the probability of outcomes of independent events

- Demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range, and determining the most appropriate measures of central tendency to report findings.
- Identify the sample space for a probability experiment involving two independent events and determine the theoretical probability of a given outcome involving two independent events.

There may be a misconception that Math is a "universal language." Thus, to equitably assess language learners in Math, ample opportunities to learn and use math vocabulary must be part of instruction (e.g., visual cues, key vocabulary, structured conversation, etc.).

Cross-Curricular Suggestions

The **Mathematics** outcomes connect to:

- receive, retain and send an object with varying speeds and accuracy (Physical Education)
- text features used in Mathematics texts (Language Arts)
- evaluate the living conditions for peoples living in British North America in the mid 1800s (Social Studies)
- conceptualize, design, and create products to standards and specifications (Technology)

Science

7

By investigating mixtures and solutions, students examine various types of solutions and develop procedures for separating them according to their physical properties. In Grade 7, students are developing the concept of the particle model of matter related to pure substances and mixtures. Students explore common and readily available mixtures in their homes (food items, personal hygiene products, items in the natural world, etc.) and use common materials, equipment and technologies to separate the component parts of mixtures and solutions.

Building on this learning leads naturally to investigations of the ways that mixtures in the Earth's crust are identified and extracted. Investigation and study of solutions and mixtures applied to Earth's crust highlights the connection between the role of technology in identifying and separating the minerals found in the Earth's crust (mining). Mixtures and solutions and the Earth's crust provide the contexts for learning the key scientific concepts through science inquiry.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Key Concepts

- The particle model of matter
- Characteristics of solutions
- Factors affecting solubility
- Separation techniques based on physical properties

Students will use the following scientific processes and skills in their investigations:

Initiate and Plan

- Ask questions that arise from careful observation of phenomena, models or unexpected results.
- Determine variables (e.g., dependent, independent and control) to formulate a hypothesis.
- Identify appropriate tools, materials or equipment required for an investigation.
- Develop (with guidance) investigation procedures for a fair test or design a solution to a practical problem.

Perform and Record

- Design an experimental procedure to test a hypothesis or design a plan to build a prototype.
- Apply scientific ideas or principles to test a design (e.g., object, tool, process, system).
- Use tools and equipment appropriately (proper handling, transport, etc.).
- Record qualitative and quantitative data using tools as appropriate.
- Develop a model to show the relationships among variables.

Analyze and Explain

This stage of the process is most directly related to numeracy.

- Evaluate the accuracy of various methods for collecting data.
- Construct graphical displays (e.g., drawings, charts, maps, tables, and graphs).
- Apply concepts of probability and statistics (e.g., mean, median, mode, and variability).
- Identify possible sources of error.
- Draw a conclusion based on evidence gathered from scientific experiment or testing of the designed solution.

Communicate and Collaborate

This stage of the process is most directly related to English Language Arts.

- Work together to examine own and other's knowledge.
- Choose a format of communication appropriate to purpose (e.g., reports, data tables, scientific models).
- Discuss procedures, results and conclusions of investigations using scientific terminology.
- Discuss the design process leading to the solution using technological terminology.
- Communicate answers to questions or solutions to problems based on evidence.

Students will apply sustainable practices in their scientific investigations and in their communities. They will:

- Follow guidelines for safe use of equipment to conduct a scientific experiment.
- Follow guidelines for safe use of tools to build a prototype of a solution.
- Use science and technological knowledge when considering issues of concern to them.
- Reflect on various aspects of an issue and makes decisions about possible actions.

Cross-Curricular Suggestions

The **Science** outcomes connect to:

- create texts, collaboratively and independently, for specific audiences and purposes (Language Arts),
- text features used in Science texts (Language Arts),
- shape and space (Mathematics),
- statistics and probability (Mathematics),
- follow rules, routines and procedures of safety in a variety of activities and facilities (Physical Education).

See Appendix C: Science Inquiry Process Cycle.

7 Information Communication and Applied Technology

Students will use the design process to produce solutions and create products. They will develop their knowledge and understanding of digital systems and data and will improve their computational thinking. Over Grades 6-8, the complexity of projects and the level of interaction with technology will increase. the grades.

Fundamentals: Understand technological operations and concepts

The following outcomes connect with learning in English and French Language Arts, Math, Science, Visual Art and Music and provide opportunities for meaningful projects.

- Consistently demonstrate safe use of and care for tools and technology applications.
- Conceptualize, design, and create products to standards and specifications.
- Communicate information and ideas using a variety of multimedia.

Computational Thinking: Practice critical thinking and problem-solving skills

The following outcomes connect to learning in Math and provide opportunities for meaningful projects.

- Solve technological problems.
- Examine data, draw conclusions, and recommend solutions to improve performance.
- Work in teams to solve problems.
- Demonstrate computer coding/programming concepts and terminology.

Course and Topic Specific: Practice responsible citizenship

The following outcomes connect to learning in Social Studies, Personal Wellness, and Language Arts and provide opportunities for meaningful projects.

- Examine current issues related to technology.
- Interact, collaborate, and publish using technology.
- Respect the Copyright Act.
- Understand the concept of, and demonstrate appropriate decision making with regards to “Digital Footprint.”
- Practice safe, legal, and ethical use of technology.

Learning in Information Communication and Applied Technology supports learning in all other curricular areas.

Projects that develop outcomes in technology often connect to learnings in Math and provide opportunities to apply concepts and highlight how math is useful in life.

Responsible citizenship outcomes connect to learning in Personal Wellness, Social Studies and Language Arts and provide opportunities for reinforcing learning and investigations of issues important to adolescents.

Specific Cross-Curricular Suggestions

The Information Communication and Applied Technology outcomes connect to:

- selected examples of empowerment and disempowerment in Canada (Social Studies)
- graphing a table of values from a linear relation (Mathematics)

Visual Art

7

Through the visual arts, students will continue to develop their skills and strategies to create and understand the world. They will develop awareness, appreciation, and understanding of personal life experiences and events in the past and present. Over Grades 7 and 8, students will refine technical skills and increase the complexity of their artworks.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Create and express visual ideas

- Organize the elements of art to create images that convey a personal message and evidence of observation skills. Elements may include complementary colours, contour, shape, and form.
- Describe the principles of design in the world around us. Principles may include balance, emphasis, repetition, and movement.
- Create art works as a response to a variety of art styles.
- Use observation and memory to record and create recognizable images of the real-world; include cross-hatching, continuous line, layering, stippling and proportion.

Evaluate self, peer and public showings

- Distinguish elements, principles, genres and stylistic characteristics of visual art.
- Demonstrate, through multiple means of expression, understanding of visual art which may include drawing, painting, printmaking (stencil, stamp, relief printing, etc.), mixed media (collage, assemblage of natural materials, etc.), and three-dimensional (sculpture, clay, papier maché, etc.).

Use critical viewing to distinguish and respond to elements of visual art

- Explain the importance of art for both individuals and societies.
- Describe stylistic characteristics across historical eras and from diverse cultures including local examples.

Cross-Curricular Suggestions

The **Visual Art** outcomes connect to:

- explorations of empowerment (e.g. art that depicts Le Grand Dérangement can be explored to understand this important aspect of local history) (Social Studies)
- connections between music and other artistic disciplines (Music)
- conceptualize, design, and create products to standards and specifications (Technology)

Music

7

While being engaged in music activities, students learn more than music content and skills. As with any creative endeavour, many thought processes, learning strategies, and ways of expression are refined and transferred to other aspects of life. Like other art forms, music offers unique experiences from which a better understanding of the world can emerge. Students who are engaged in music can develop a comprehensive awareness, appreciation, and understanding of personal life experiences and events.

The performance of music is an integral part of any comprehensive music program. Teachers must continually work at balancing the delivery of the music program between performance and non-performance learning activities.

Compose and express musical ideas

- Use traditional and non-traditional notation and technology to create, rehearse, and sing/play short compositions with complex melodies and rhythms.

New melodies:

- Minor Scale (Harmonic, Melodic, Natural)
- Chord inversions
- Polyphonic textures

New rhythms:

Irregular metres (5/4, 7/4)

- Explore solutions to problems related to creating and performing music.
- Evaluate self, peer and public performance.

Use active listening to distinguish and respond to the elements of music

- Distinguish elements of music (melody, harmony, beat, rhythm, dynamics, tempo, timbre, texture, articulation), structural devices (binary and ternary form, traditional and invented, and chord progressions), and genres.
- Demonstrate understanding through multiple means of expression (singing, playing, composing, etc.).
- Use music terminology to justify personal responses to music.

Construct critical awareness for the value of music in history and culture

- Express the purpose and function of music in history and cultures and examine the influence of music in shaping identities.
- Examine the influence of the music industry in popular Western culture and the media.
- Examine connections between music and other artistic disciplines.
- Examine the role of music in historical eras and from diverse cultures including local examples.

Cross-Curricular Suggestions

The **Music** outcomes connect to:

- explorations of empowerment (e.g., music that reflects cultural views of empowerment and/or disempowerment) (Social Studies)
- rhythmic/creative movements with variations of body awareness, space awareness, qualities and relationships (Physical Education)
- add and subtract fractions (Mathematics)

Physical Education

7

Students develop more complex movements, learn to set and meet personal fitness goals, and develop enjoyment of movement, cooperation, responsibility, and respect through games, challenges, and sport.

Demonstrate efficient and effective movement skills and concepts, a functional level of activity specific motor skills, and efficient and effective body mechanics

- Improve and refine locomotor and non-locomotor skills into complex movement.
- Present rhythmic/creative movements with variations of body awareness, space awareness, qualities and relationships.
- Receive, retain, and send an object with varying speeds and accuracy, individually and with others, and while using an implement.

Demonstrate personal functional level of physical fitness through participation in physical activity

- Set and develop goals to develop personal fitness to maintain a healthy lifestyle and to improve performance.
- Follow rules, routines, and procedures of safety in a variety of activities and facilities.
- Analyze basic sport specific concepts in relation to body mechanics and skill analysis in themselves and others.

Demonstrate an ability to cooperate with others (within the parameters of physical distancing)

- Demonstrate fair play, etiquette, self-confidence and responsibility while participating in a variety of physical activities.
- Participate in cooperative games that are meaningful to students of various abilities, interests and diverse backgrounds.
- Explain the enjoyment gained alone and with others, from being physically active.

Cross-Curricular Suggestions

The **Physical Education** outcomes connect to:

- examine data, draw conclusions and recommend solutions to improve performance (Technology)
- the addition, subtraction, multiplication and division of decimals to solve problems (Mathematics)
- personal life roles and the importance of work/life balance (Personal Wellness)
- the evaluation of self, peer and public performance (Music)

Personal Wellness

8

Students become more connected to their peers and the world around them. They analyze influences, apply relationships skills and make plans for managing their own health. This includes developing their identity within their community through the application of themselves, their personal purpose and their future plans.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Care of self, family, and community

- Describe various environmental factors that affect health and health choices.
- Apply strategies for personal wellness for coping with stress.
- Integrate respect for all people and diverse cultures, including Wabanaki, to improve personal, family and community wellness (e.g., race, religion, gender identity, sexual orientation, disability etc.).

Examine the use, misuse, and abuse of self, substances and media

- Understand what an addiction is and how it can influence behaviours (e.g., video gaming, vaping, self-harming behaviours).
- Practice positive decision making as it relates to self and others (e.g., consent, digital footprint, healthy choices).

Demonstrate an understanding of their growth and development (taught in English to all students)

- Accept, respect, and understand self and others.
- Apply competencies that maintain healthy interpersonal relationships.
- Understand the role of the media in establishing feelings and attitudes about self and relationships with others, including dating and becoming sexually active.
- Understand choice and long- and short-term consequences and responsibilities that exist with becoming sexually active.
- Discuss diversity, identities, and human rights (e.g., genders, gender identities, gender expression and sexual orientation).

Develop a statement of purpose and supporting life goals

- Develop skills and attitudes needed to pursue career pathways.
- Develop personal qualities, strengths and competencies in relation to career pathways.
- Plan personal life roles while integrating an understanding of work/life balance.

Cross-Curricular Suggestions

The **Personal Wellness** outcomes connect to:

- the concept of worldview (Social Studies)
- fair play, etiquette, self-confidence and responsibility while participating in a variety of physical activities (Physical Education)
- images that convey a personal message (Visual Arts)
- demonstration of appropriate decision making with regards to “Digital Footprint” (Technology)

English Language Arts

8

Students listen to, view, read, and discuss increasingly complex texts, representing a variety of voices, for enjoyment, learning and personal understanding, collaboratively and independently. They select specific strategies to meet their needs as listeners/readers/viewers and text creators. They speak, write, and represent a variety of texts. They understand that forms chosen must match purpose and audience. Classroom discussion is modelled and respected as a mode for growing learning.

Subject area association with NB Global Competencies SOME STRONG

- COLLABORATION
- COMMUNICATION
- CRITICAL THINKING AND PROBLEM-SOLVING
- INNOVATION, CREATIVITY, AND ENTREPRENEURSHIP
- SELF-AWARENESS AND SELF-MANAGEMENT
- SUSTAINABILITY AND GLOBAL CITIZENSHIP

Build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts, representing all voices

- Explain how text creators use word structures, syntax, vocabulary, fluency, text features and links to create meaning and to achieve certain purposes and use, intentionally, those devices to construct meaning and enhance understanding.
- Identify processes/strategies used by listeners/readers/viewers and self to make meaning of increasingly complex texts and use this awareness to improve.
- Use research strategies to access and select information from a variety of sources to meet specific needs with increasing speed, accuracy and intention.

Respond personally and critically to the works of authors, creators, illustrators, and speakers

- Justify personal opinions about a range of texts by providing extended explanations, examples, and supporting arguments.
- Critically analyze texts, with sensitivity, for portrayal of cultures; ideas, values, perceptions, and points of view; relevance and reliability of information; and, how and when personal identity influences meaning and personal response.

Speak, write and represent to learn about self, others, and the world

- Ask questions that probe for accuracy, relevancy, and validity, and respond thoughtfully and appropriately.
- Express a point of view and support it with relevant information, while engaging with others who may not share the same point of view.
- Demonstrate competency in using strategies to extend learning; explore their own thoughts and consider other's ideas; reflect on their feelings, values, and attitudes; and identify problems and describe logical solutions.

Create texts, collaboratively and independently, for specific audiences and purposes

- Consider and choose forms that match personal voice, purpose (e.g., to define, report, persuade, compare) and audience.
- Choose from a range of pre-writing, drafting, revising, editing and proofreading strategies to craft texts to influence reader's/viewer's/listener's point of view.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Language Learners

Writing is generally the last language skill to develop; therefore, language learners at the A1 and A2 levels of the CEFR may need to meet their outcomes through other forms of representation, while developing their writing skills.

French Immersion Language Arts

(Grade 3 Entry to Immersion)

8

French Immersion students use their second language to learn and interact throughout the day. Through this application of language and specific language instruction they develop language competence. French Immersion Language Arts teaches the language to support learning in all subject areas and promotes active engagement in New Brunswick and Canadian culture.

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to understand the essential message in texts that contain familiar or non-familiar language in a variety of situations.

Produce a message according to the context and intention of communication

- Use appropriate language functions and vocabulary to respond to a variety of familiar and unfamiliar situations (e.g., academic, social).
- Communicate and present information in a variety of contexts by expressing ideas, asking questions, and sharing feelings and opinions with justifications.
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use appropriate language functions and vocabulary to respond to social interactions.
- Interact in unpredictable situations.
- Use technology to facilitate communication and interaction in authentic situations.

Select and read independently a variety of fiction and nonfiction texts.

- Use strategies to read with accuracy and fluency, to expand vocabulary, and to make meaning of texts (literal, inferential and evaluative).
- Find elements of the French culture in texts containing familiar language (e.g., cultural references, word choice, regional situation).

Write texts according to the intention and audience

- Write a variety of coherent texts on different topics (academic, researched, or of interest) by following the process of writing, applying the six traits of writing, and using exemplars/models.
- Use elements of French culture in texts.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Grade 3 entry FI students will work within the B1.1 proficiency level as described on the Common European Framework of Reference (CEFR) in oral, reading, and writing components. See Appendix A: Language Targets for French Programs.

French Immersion Language Arts

(Grade 6 Entry to Immersion)

8

Subject area association with NB Global Competencies — SOME STRONG

Understand a variety of oral texts according to the situation of communication

- Use listening strategies to monitor comprehension.
- Use listening strategies to understand the essential message in short, clearly articulated texts, that contain familiar language about common and / or unpredictable situations.

Produce a message according to the context and intention of communication

- Use language functions and acquired vocabulary to respond to a variety of academic and social situations.
- Communicate and present information in a variety of contexts by expressing ideas, asking questions, sharing feelings and opinions (with justifications).
- Use the language to express knowledge and awareness of the French culture.

Interact according to the social and academic situation of communication

- Use listening and speaking strategies to monitor oral interactions.
- Use language functions and vocabulary to respond to social interactions.
- Participate in interactions relating to common and sometimes unpredictable situations with support.
- Use technology to facilitate communication and interaction in authentic situations with support.

Select and read independently a variety of fiction and nonfiction texts

- Use strategies to read with accuracy and fluency, expand vocabulary and to make meaning of texts (literal, inferential and evaluative).
- Find, with support, key elements of the French culture in texts containing familiar language (e.g., cultural references, word choice, regional situation).

Write texts according to the intention and audience

- Write texts on familiar and/or studied topics.
- Write simple texts by following the process of writing, applying the six traits of writing, and using exemplars/models.
- Use elements of French culture in texts.

Cross-Curricular Suggestions

Because the study and creation of texts are part of learning in all areas, many language arts outcomes can be embedded in all curricular areas and vice versa.

A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Grade 6 entry FI students will work within the A2.2 proficiency level as described on the Common European Framework of Reference (CEFR) in oral components, and A2.1 in reading and writing components. See Appendix A: Language Targets for French Programs.

Social Studies

8

Through a developing lens of global citizenship, students will examine the physical, economic, cultural, ethnic, and historical landscapes of Atlantic Canada, considering how global trends are represented in these regions and what the future holds. Students will use civic practices, historical and geographical thinking to explore global citizenship. See Appendix B: Processes for Learning in Social Studies.

Investigate cultures in Atlantic Canada

- Analyze local and global factors that have shaped cultures in Atlantic Canada.
- Research the cultural, ethnic, and linguistic groups in Atlantic Canada.

Analyze economic factors in Atlantic Canada

- Illustrate the different economic sectors in Atlantic Canada.
- Investigate local, regional, and global economic patterns and related issues that affect Atlantic Canada.
- Demonstrate an understanding of trade and other economic linkages between Atlantic Canada and wider communities (national and global).

Atlantic Canada must also be understood as Wabanaki territories with the responsibility to include in learning experiences local Indigenous nations, peoples, histories and cultures.

Consider interdependence in Atlantic Canada

- Explore the concept of worldview.
- Determine how Atlantic Canadians can contribute as members of the global community.
- Assess the need for connections with the global community in order to ensure the wellbeing of Atlantic Canada.

Cross-Curricular Suggestions

The **Social Studies** outcomes connect to:

- examine data, draw conclusions and recommend solutions (Technology)
- demonstrate understanding through multiple means of expression (Visual Arts)
- critique ways in which data is presented (Mathematics)
- the importance of art for both individuals and societies (Visual Arts)
- the integration of various strategies to make meaning of a variety of texts (Language Arts)

Post Intensive French

8

Students will learn to initiate and maintain predictable face-to-face conversations and satisfy limited social demands with some spontaneity in language production. Learning a second language develops intercultural and pluricultural competencies and promotes active engagement in New Brunswick and Canadian culture.

Develop oral communication (listening, oral production and interaction)

- Speak and listen in order to explore, deepen and clarify their thoughts, ideas, feelings and experiences.
- Communicate efficiently in French and converse adequately in a range of daily situations.
- Hold conversations with more ease, demonstrating sensitivity and respect, taking into account the situation, the audience and the intention of the conversation.
- Compare former lifestyles with today's lifestyle.
- Talk about the aesthetic and practical characteristics of an object.
- Summarize the essential points of an interview on life in the past.
- Express their feelings with respect to music from previous time periods.

Read and view to develop second language

- Read age-appropriate texts of fiction in unguided situations.
- View and respond to a variety of media in the context of community.
- Select, make meaning of, and react personally to a range of fiction, non-fiction and visual texts, presented on various media in order to meet a range of needs and/or related to personal interests.
- Use strategies to choose and regroup information to support understanding.

Write and represent to develop second language

- Use writing and other forms of representation to explore, clarify and study their thoughts, feelings, experiences and to communicate about their learning.
- Create texts collaboratively and individually for a range of audiences and for a variety of intentions.
- Use strategies to make texts more precise to improve communication

Cross-Curricular Suggestions

Development of language competencies are interrelated. In Post Intensive French, this is achieved through the exploration of themes (usually four per school year). A thematic approach contextualizes language to build confidence and competence.

The goals and experiences in French Second Language learning in Grade 8 will help students round out their capacity at the A2.1 proficiency level and start to move into the range of A2.2 as described on the Common European Framework of Reference (CEFR). See Appendix A: Language Targets for French Programs.

Note: English Language Arts and French language learning work together to strengthen language acquisition.

Mathematics

8

Math learners will develop their proportional reasoning using percentages, rates, and ratios. They will analyze linear relations and solve problems algebraically. Learning in Grade 8 Math supports the development of critical thinking which will provide a foundation for complex problem solving, financial literacy, and job-related expectations.

Number Sense: developed through the natural connections of numbers to experiences, and the use of arithmetic operations

- Demonstrate an understanding of percent, ratio and rate. Solve problems involving percentages, rates, ratios and proportional reasoning.
- Model (concretely, pictorially and symbolically) and solve problems involving multiplication and division of positive fractions and mixed numbers.
- Model (concretely, pictorially and symbolically) and solve problems involving multiplication and division of integers.

Patterns and Relations: analyze linear relations and solve problems using the knowledge of the preservation of equality

- Graph and analyze two variable linear relations.
- Model and solve problems using linear equations concretely, pictorially and symbolically.

Shape and Space: use measurement and formulae derived from characteristics of 3-D objects and 2-D shapes to solve problems

- Develop and apply the Pythagorean Theorem to solve problems.
- Draw and construct nets for 3-D objects and determine the surface area of right rectangular prisms, right triangular prisms and right cylinders to solve problems.

Statistics: compare various methods of displaying data and evaluate their effectiveness

- Critique ways in which data are presented.

There may be a misconception that Math is a "universal language." Thus, to equitably assess language learners in Math, ample opportunities to learn and use math vocabulary must be part of instruction (e.g., visual cues, key vocabulary, structured conversation, etc.).

Cross-Curricular Suggestions

The **Mathematics** outcomes connect to:

- local, regional, and global economic patterns and related issues that affect Atlantic Canada (Social Studies)
- basic sport specific concepts in relation to body mechanics (Physical Education)
- asking questions that probe for accuracy, relevancy, and validity; responding thoughtfully and appropriately (Language Arts)
- elements of music (melody, harmony, beat, rhythm, dynamics, timbre, texture, articulation, etc.) (Music)

Science

8

Earth's marine and freshwater systems provides opportunity for students to investigate the relationship between the geomorphology of Earth and the dynamics of oceans and freshwater basins. They investigate how oceans and the shorelines interact, what relationships exist between ocean currents, wind, and climate systems, and how these abiotic factors impact upon life in and around the oceans.

Building on this learning leads naturally to investigations about the relationship between climate and the ocean, and its impacts (e.g., infrastructure, lifestyles, economy, etc.) on Atlantic communities. Water systems on Earth provide the contexts for learning the key scientific concepts through science inquiry.

Key Concepts

- Ocean basins and continental drainage systems
- Interaction and relationships in water systems
- Waves, tides and water currents
- Processes of erosion and deposition

Students will use the following scientific processes and skills in their investigations:

Initiate and Plan

- Ask questions that arise from careful observation of phenomena, models or unexpected results.
- Determine variables (e.g., dependent, independent and control) to formulate a hypothesis.
- Identify appropriate tools, materials or equipment required for an investigation.
- Develop (with guidance) investigation procedures for a fair test or design a solution to a practical problem.

Perform and Record

- Design an experimental procedure to test a hypothesis or design a plan to build a prototype.
- Apply scientific ideas or principles to test a design (e.g., object, tool, process, system).
- Use tools and equipment appropriately (proper handling, transport, etc.).
- Record qualitative and quantitative data using tools as appropriate.
- Develop a model to show the relationships among variables.

Analyze and Explain

This stage of the process is most directly related to numeracy.

- Evaluate the accuracy of various methods for collecting data.
- Construct graphical displays (e.g., drawings, charts, maps, tables, and graphs).
- Apply concepts of probability and statistics (e.g., mean, median, mode, and variability).
- Identify possible sources of error.
- Draw a conclusion based on evidence gathered from scientific experiment or testing of the designed solution.

Communicate and Collaborate

This stage of the process is most directly related to English Language Arts.

- Work together to examine own and other's knowledge.
- Choose a format of communication appropriate to purpose (e.g., reports, data tables, scientific models).
- Discuss procedures, results and conclusions of investigations using scientific terminology.
- Discuss the design process leading to the solution using technological terminology.
- Communicate answers to questions or solutions to problems based on evidence.

Cross-Curricular Suggestions

The **Science** outcomes connect to:

- create texts, collaboratively and independently, for specific audiences and purposes (Language Arts)
- text features used in Science texts (Language Arts)
- shape and space (Mathematics)
- statistics and probability (Mathematics)
- follow rules, routines and procedures of safety in a variety of activities and facilities (Physical Education)

Students will apply sustainable practices in their scientific investigations and in their communities. They will:

- Follow guidelines for safe use of equipment to conduct a scientific experiment.
- Follow guidelines for safe use of tools to build a prototype of a solution.
- Use science and technological knowledge when considering issues of concern to them.
- Reflect on various aspects of an issue and makes decisions about possible actions.

See Appendix C: Science Inquiry Process Cycle.

8 Information Communication and Applied Technology

Students will use design process to produce solutions and create products. They will develop their knowledge and understanding of digital systems and data and will improve their computational thinking. Over Grades 6-8, the complexity of projects and the level of interaction with technology will increase.

Fundamentals: Understand technological operations and concepts

The following outcomes connect with learning in Language Arts, Math, Science, Visual Art and Music and provide opportunities for meaningful projects.

- Consistently demonstrate safe use of and care for tools and technology applications.
- Conceptualize, design, and create products to standards and specifications.
- Communicate information and ideas using a variety of multimedia.

Computational Thinking: Practice critical thinking and problem-solving skills

The following outcomes connect to learning in Math and provide opportunities for meaningful projects.

- Solve technological problems.
- Examine data, draw conclusions and recommend solutions to improve performance.
- Work in teams to solve problems.
- Demonstrate computer coding/programming concepts and terminology.

Course and Topic Specific: Practice responsible citizenship

The following outcomes connect to learning in Personal Wellness and Language Arts and can be connected to provide opportunities for meaningful projects.

- Examine current issues related to technology.
- Interact, collaborate, and publish using technology.
- Respect the Copyright Act.
- Understand the concept of and demonstrate appropriate decision making with regards to “Digital Footprint.”
- Practice safe, legal, and ethical use of technology.

Learning in Information Communication and Applied Technology supports learning in all other curricular areas.

Projects that develop outcomes in technology often connect to learnings in Math and provide opportunities to apply concepts and highlight how math is useful in life.

Responsible citizenship outcomes connect to learning in Personal Wellness, Social Studies and Language Arts and provide opportunities for reinforcing learning and investigations of issues important to adolescents.

Specific Cross-Curricular Suggestions

The Information Communication and Applied Technology outcomes connect to:

- use observation and memory to record and create recognizable images of the real-world (Technology)
- trade and other economic linkages between Atlantic Canada and wider communities (national, global)
- (Social Studies)
- basic sport specific concepts in relation to body mechanics (Physical Education)

Visual Art

8

Through the visual arts, students will continue to develop their skills and strategies to create and understand the world. They will learn awareness, appreciation, and understanding of personal life experiences and events in the past and present. Over Grades 7 and 8, students will refine technical skills and increase the complexity of their artworks.

Create and express visual ideas

- Organize the elements of art to create images that convey a personal message and provide evidence of observation skills. Elements may include complementary colours, contour, shape, form, etc.
- Recognize and describe the principles of design in the world around us. Principles may include balance, emphasis, repetition, movement, etc.
- Create art works based on a response to a variety of art styles.
- Use observation and memory to record and create recognizable images of the real-world include cross-hatching, continuous line, layering, stippling and proportion.

Evaluate self, peer and public showings

- Distinguish elements, principles, genres and stylistic characteristics of visual art.
- Demonstrate, through multiple means of expression, understanding of visual art which may include drawing, painting, printmaking (stencil, stamp, relief printing, etc.), mixed media (collage, assemblage of natural materials, etc.), and three-dimensional (sculpture, clay, papier maché, etc.).

Use critical viewing to distinguish and respond to elements of visual art

- Explain the importance of art for both individuals and societies.
- Describe stylistic characteristics across historical eras and from diverse cultures, including local examples.

Cross-Curricular Suggestions

The **Visual Art** outcomes connect to:

- the investigation of how artists have depicted the solar system and landscape (Social Studies and Science)
- the influence of the music industry in popular Western culture and the media (Music)
- rhythmic/creative movements with variations of body awareness, space awareness, qualities and relationships (Physical Education)
- the use of a variety of multimedia (Technology)

Music

While being engaged in music activities, students learn more than music content and skills. As with any creative endeavour, many thought processes, learning strategies, and ways of expression are refined and transferred to other aspects of life. Like other art forms, music offers unique experiences from which a better understanding of the world can emerge. Students who are engaged in music can develop a comprehensive awareness, appreciation, and understanding of personal life experiences and events.

The performance of music is an integral part of any comprehensive music program. Teachers must continually work at balancing the delivery of the music program between performance and non-performance learning activities.

Compose and express musical ideas

- Improvise or create, rehearse, and sing/play compositions using increasingly complex melodies, rhythms and forms, to communicate specific meaning using traditional and non-traditional notation and technology.
- Consider solutions related to creating and performing music in groups.
- Evaluate self, peer and public performance using specific music terminology.

Use active listening to distinguish and respond to the elements of music

- Distinguish elements of music (melody, harmony, beat, rhythm, dynamics, tempo, timbre, texture, articulation, etc.), structural devices and multiple genres.
- Demonstrate understanding through multiple means of expression (singing, playing, composing, etc.).
- Analyse and evaluate interpretations of personal compositions and that of others using appropriate musical terminology.

Construct critical awareness for the value of music in history and culture

- Express the purpose and function of music in history and across cultures and examine the influence of music in shaping identity.
- Critique the influence of the music industry in popular Western culture and the media.
- Critique connections between music and other artistic disciplines.
- Examine the role of music in historical eras and from diverse cultures, including local examples.

Cross-Curricular Suggestions

The **Music** outcomes connect to:

- a range of pre-writing, drafting, revising, editing and proofreading strategies (Language Arts)
- the concept of worldview (Social Studies)
- rhythmic/creative movements with variations of body awareness, space awareness, qualities and relationships (Physical Education)
- the application of strategies for personal wellness for coping with stress (Personal Wellness)

Physical Education

8

Students develop more complex movements, learn to set and meet personal fitness goals, and develop enjoyment of movement, cooperation, responsibility, and respect through games, challenges, and sport.

Demonstrate efficient and effective movement skills and concepts, a functional level of activity specific motor skills, and efficient and effective body mechanics

- Apply and refine combined locomotor and non-locomotor skills into complex movement alone and with others and in a variety of environments.
- Apply rhythmic/creative movements with variations of body awareness, space awareness, qualities and relationships.
- Receive, retain, and send an object with varying speeds, accuracy and distance, individually and with others, and while using an implement.

Demonstrate personal functional level of physical fitness through participation in physical activity

- Set and refine goals to develop personal fitness for a healthy lifestyle and to improve performance.
- Follow rules, routines, and procedures of safety in a variety of activities and facilities.
- Analyze and explain basic sport specific concepts in relation to body mechanics in themselves and others.

Demonstrate an ability to cooperate with others (within the parameters of physical distancing)

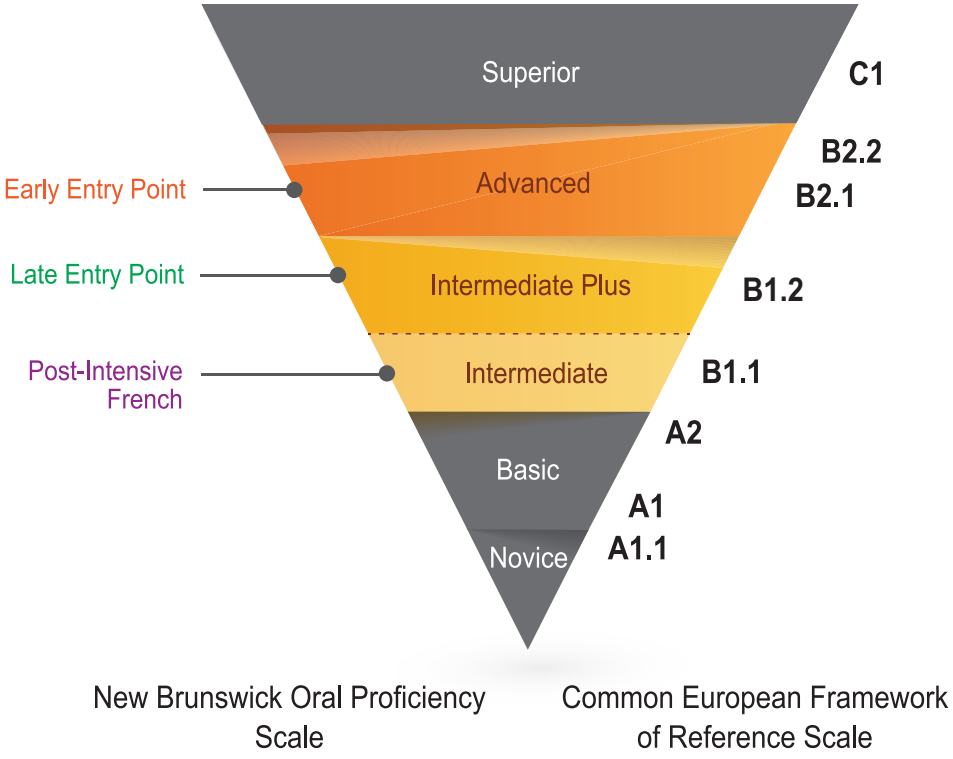
- Demonstrate fair play, etiquette, self-confidence and responsibility while participating in a variety of physical activity.
- Participate in cooperative games that are meaningful to students of various abilities, interests and diverse backgrounds.
- Explain the enjoyment and benefits gained from being physically active, alone or with others.

Cross-Curricular Suggestions

The **Physical Education** outcomes connect to:

- the need for connections with the global community in order to ensure the wellbeing of Atlantic Canada (Social Studies)
- percent, ratio and rate (Mathematics)
- the acceptance, respect, and understanding of self and others (Personal Wellness)
- the communication of information and ideas using a variety of media (Technology)

Appendix A: Language Targets for French Programs



Appendix B: Processes for Learning in Social Studies

Civic Practices

Investigating Citizenship

1. Express worldview
2. Use appropriate critical questions to gain understanding
3. Explain the importance of participating in society
4. Demonstrate fair and open decision-making
5. Engage in civil discourse
6. Assess the probability of change from social action

Historical Thinking

Investigating History

1. Establish historical significance
2. Use primary source evidence
3. Examine how things change and how they stay the same
4. Analyze cause and effect
5. Assume historical points of view
6. Attempt to understand the ethical effects of events in history

Geographic Thinking

Investigating Place

1. Determine importance in location
2. Investigate patterns and trends
3. Examine connections
4. Develop geographical point of view
5. Use evidence and interpretation
6. Engage in ethical decision making

Appendix C: Science Inquiry Process Cycle