Indigenous Knowledge and Perspectives: Cross-Curricular References K–9 Grade 1

Context

In B.C.’s redesigned curriculum, Indigenous knowledge and perspectives are integrated throughout all areas of learning and are evident in the curriculum’s rationale statements, goals, big ideas, mandated learning standards, and elaborations. The First Peoples Principles of Learning offer a crucial lens for curriculum, placing a significant importance on the authentic integration of Indigenous knowledge and perspectives in relevant and meaningful ways.

The intent behind this integration is to promote a growing understanding of Indigenous peoples in B.C.
that will contribute to the development of educated citizens who reflect on and support reconciliation. This approach to Indigenous education encourages enlightened discussion among teachers and students in all areas of learning and grade levels, and this approach values and prioritizes Indigenous knowledge and perspectives that can only be found in B.C.

Purpose

The *Indigenous Knowledge and Perspectives: Cross-Curricular References in Grade 1* resource is intended to support teachers in authentically integrating Indigenous knowledge and perspectives into their classrooms. This resource provides a cross-curricular overview of the explicit and implicit references to Indigenous knowledge and perspectives in the Big Ideas, Curricular Competencies, and Content across all subject areas in the Grade 1 curriculum.

Explicit References

Explicit references include the Big Ideas, Curricular Competencies, and Content that directly refer to Indigenous knowledge and perspectives. For example, the Grade 1 Français langue première curriculum includes the following explicit reference:

Français langue première, Big Idea, **Aboriginal narratives play an important role in the exploration of individual, family, generational, and community identity.**

Implicit References

Implicit references are Big Ideas, Curricular Competencies, and Content that indirectly refer to Indigenous knowledge and perspectives. For example, the Grade 1 Physical and Health Education curriculum includes the following implicit reference.

Physical and Health Education, Content, **caring behaviours in groups and families**

*could include:*

* *nurturing*
* *providing guidance*
* *loving*
* *respecting*

The implicit references included in this resource represent just one perspective and should not be considered the only interpretation. Identifying implicit references depends on personal and cultural background, prior knowledge and experience, subject-matter expertise, points of view, and connections to place\*. As such, the implicit references in this resource serve only as a guide and should not be viewed as a conclusive list.

Note on Elaborations: Explicit references to Indigenous knowledge
and perspectives that are found within the Elaborations of Big Ideas, Curricular Competencies, or Content are considered *implicit* unless they are accompanied by an explicit reference in the Big Ideas, Curricular Competencies, or Content.

The key below shows how the information in the chart is structured:

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| --- | --- |
| Bolded print | Mandated Learning Standard |
|  | Sub-points of a Learning Standard |
|  | *Elaborations* |
|  | *Key questions or samples* |

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|  | **ADST** | **Arts** | **Career Ed.** | **ELA** | **Français langue première** | **Français langue seconde – immersion** | **Languages** | **Mathematics** | **PHE** | **Science** | **Social Studies** |
| **Big Ideas** | **Explicit** |  |  |  |  | Aboriginal narratives play an important role in the exploration of individual, family, generational, and community identity. |  |  |  |  |  |  |
| **Implicit** |  | People create art to express who they are as individuals and community.People connect to others and share ideas through the arts. | Strong communities are the result of being connected to family and community and working together toward common goals.Communities include many different roles requiring many different skills.Learning is a lifelong enterprise. | Stories and other texts help us learn about ourselves and our families. story/stories: * narrative texts, whether real or imagined, that teach us about human nature, motivation, and experience, and often reflect a personal journey or strengthen a sense of identity. They may also be considered the embodiment of collective wisdom. Stories can be oral, written, or visual, and used to instruct, inspire, and entertain listeners and readers.

Text/texts: * Text and texts are generic terms referring to all forms of oral, written, visual, and digital communication: -oral texts include speeches, poems, plays, and oral stories,- written texts include novels, articles, and short stories, - visual texts include posters, photographs, and other images, - digital texts include electronic forms of all of the above, - oral, written, and visual elements can be combined (eg. In dramatic presentations, graphic novels, films, web pages, advertisements).

Through listening and speaking, we connect with others and share our world. | Through texts, we learn about ourselves and discover the world around us.* texts: a text is a coherent set of written, oral or visual elements that convey meaning and serve to communicate or transmit a message. Texts have numerous representations and can be in the form of Aboriginal narratives, articles, advertising, novels, picture story books, legends, comic books, biographies, correspondence, invitations, instructions, diagrams, charts, news stories, films, songs, poems, nursery rhymes, photographs, totem poles, images, works of art, oral presentations, blogs, surveys, reports, text messages, videos, television programs, etc.
 |  |  | Numbers to20 represent quantities that can be decomposed into 10s and 1s.* What stories live in numbers?
* How do numbers help us communicate and think about place?

Objects and shapes have attributes that can be described, measured, and compared.* What stories live in these shapes?

Concrete graphs help us to compare and interpret data and shoe one-to-one correspondence.* What stories can data tell us
 | Learning about ourselves and others helps us develop a positive attitude and caring behaviours, which helps us build healthy relationships.Good health comprises physical, mental, and emotional well-being. | Living things have features and behaviours that help them survive their environment.* How do local plants and animals depend on their environment?
* How do plants and animals use their features to respond to stimuli in their environments?
* How do plants and animals adapt when their basic needs are not being met?

Observable patterns and cycles occur in the local sky and landscape. * What kinds of patterns in the sky and landscape are you aware of?
* How do patterns and cycles in the sky and landscape affect living things?
 | We shape the local environment, and the local environment shapes who we are and how we live.Healthy communities recognize and respect the diversity of individuals and care for the local environment. |
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| **Curricular Competencies** | **Explicit** |  |  |  | Show awareness of how story in First Peoples cultures connects people to family and communitystory in First Peoples cultures: * Traditional and contemporary First Peoples stories take many forms (eg., prose, song, dance, poetry, theatre, carvings, pictures) are told for several purposes: - teaching (e.g., life lessons, community responsibilities, rites of passage), - sharing creation stories, - recording personal, family and community histories, - “mapping” the geography and resources of an area,- ensuring cultural continuity (e.g., knowledge of ancestors, language), - healing, -entertainment
 | Identify the elements and structure of Aboriginal and other stories in order to understand the overall meaning | Recognize Francophone and Aboriginal cultural elements in a text* oral, written, visual
 |  | Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures* in daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration
* Patterns are important in First Peoples technology, architecture, and artwork.
* Have students pose and solve problems or ask questions connected to place, stories, and cultural practices.

Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts* Incorporate:
	+ how and ovoid has a different look to represent different animal parts
	+ Invite local First Peoples Elders and knowledge keepers to share their knowledge
* make connections:
	+ Bishop’s cultural practices: counting, measuring, locating, designing, playing, explaining (csus.edu/ indiv/o/oreyd/ACP.htm\_files/ abishop.htm)
	+ aboriginaleducation.ca
	+ Teaching Mathematics in a First Nations Context, FNESC fnesc.ca/k-7/
 |  | Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge |  |

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| **Curricular Competencies** | **Implicit** | Generate ideas from their experiences and interests.Demonstrate their product, tell the story of designing and making their product, and explain how their product contributes to the individual, family, community, and/or environmentMake a product using known procedures or modelling of others. | Explore artistic expressions of themselves and community through creative processes* the means by which an artistic work (in dance, drama, music, and visual arts) is made; includes but is not limited to exploration, selection, combination, refinement, and reflection

Observe and share how artists use processes, materials, movements, technologies, tools, and techniques* people who create works in any of the arts disciplines (e.g., dancers, actors, musicians, visual artists); also includes the students themselves

Interpret how symbols are used through the artsExpress feelings, ideas, stories, observations, and experiences through the artsDescribe and respond to works of art | Work respectfully and constructively with others to achieve common goals.Identify and appreciate the roles and responsibilities of people in their schools, families, and communities. | Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity and communityengage actively as listeners, viewers, and readers: * connecting to personal knowledge, experiences, and traditions: participating in community and cultural traditions and practices; asking questions related to the topic at hand

Recognize the importance of story in personal, family, and community identity Exchange ideas and perspectives to build shared understandingExplore oral story telling processesoral storytelling processes: * creating an original story or finding an existing story (with permission), sharing the story from memory with others, using vocal expression to clarify the meaning of the text
 | Rely on images to understand a text |  |  | Estimate reasonably* First Peoples people used specific estimating and measuring techniques in daily life (e.g., estimating time using environmental references and natural daily/seasonal cycles, estimating temperatures based on weather systems)

Connect mathematical concepts to each other and to other areas and personal interests* to develop a sense of how mathematics helps us understand ourselves and the world around us (e.g., daily activities, local and traditional practices, the environment, popular media and news events, social justice, and cross-curricular integration)
 | Identify caring behaviours among classmates and within familiesIdentify and describe practices that promote mental well-being | Experience and interpret the local environmentExpress and reflect on personal experiences of place* Place is any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity. The connection between people and place is foundational to First Peoples perspectives of the world.

Key questions about place:* What is place?
* What are some of the ways in which people experience place?
* How can you gain a sense of place in your local environment?
* How can you share your observations and ideas about living things in your local environment to help someone else learn about place?
 | Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions* Collect informationfrom personal experiences, oral sources, and visual representations.

Explain the significance of personal or local events, objects, people, or placesSample activity:* Brainstorm alist of the most significant places in your community and explain why these locations are important
* Research the history of a significant event or person in your community

Key questions:* How does the significance of various events, objects, people, and places change over time?

Explore different perspectives on people, places, issues, or events in their lives |

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| **Content** | **Explicit** | (Note: Students are expected to use the learning standards for Curricular Competencies from Applied Design, Skills, and Technologies K-3 in combination with grade-level content from other areas of learning in cross-curricular activities to develop foundational mindsets and skills in design thinking and making). | traditional and contemporary Aboriginal arts and arts-making processes* dances, songs, stories, and objects created by Aboriginal peoples for use in daily life or to serve a purpose inspired by ceremonies or rituals as part of cultural tradition
 |  |  |  |  |  |  |  | shared First Peoples knowledge of the skylocal First Peoples knowledge of the local landscape, plants and animals* e.g., may include oral history with Elder – origins and local stories

local First Peoples understanding and use of seasonal rounds* Seasonal rounds refer to a pattern of movement from one resource-gathering area to another in a cycle that is followed each year
 | key events and developments in the local community, and in local First Peoples communitiesSample topics:* community milestones (e.g., the founding of the community, the opening and closing of local businesses, the construction of new buildings)
* celebrations and holidays
* cultural events
* growth or decline of a community

Key questions:* What is the most significant event in your local community’s history?
* How is your community different now from what it was like before settlers arrived?
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| **Content** | **Implicit** |  | symbolism as a means of expressing specific meaning* use of objects, words, or actions to represent abstract ideas; includes but is not limited to colours, images, movements, and sounds (e.g., a sad mood could be represented with blue colours, a slow tempo, or a legato line)

variety of local works of art and artistic traditions from diverse cultures and communitiesthe results of creative processes in disciplines such as dance, drama, music, and visual arts | Cultural and social awareness* Achieved by exploring self-identity, acknowledging cultural differences, honouring indigenous traditions, etc.

Roles and responsibilities at home, at school, and in the community. | structure of story oral language strategies |  | cultural elements |  | number concepts to 20* books published by Native Northwest: Learn to Count, by various artists; Counting Wild Bears, by Gryn White; We All Count, by Jason Adair; We All Count, by Julie Flett (nativenorthwest.com) using counting collections made of local materials; counting in different languages; different First Peoples counting systems (e.g., Tsimshian)
* Tlingit Math Book (yukon-ed-show-me-your-math.wikispaces.com/file/detail/Tlingit Math Book.pdf)

ways to make 10* Traditional First Peoples counting methods involved using fingers to count to 5 and for groups of 5
* traditional songs/singing and stories

addition and subtraction to 20* nature scavenger hunt in Kaska Counting Book (yukon-ed-show-me-your-math.wikispaces.com/file/detail/Kaska Counting Book.pdf)

repeating patterns* beading using 3–5 colours

direct measurement with non-standard units (non-uniform and uniform)* book: An Anishnaabe Look at Measurement, by Rhonda Hopkins and Robin King-Stonefish (strongnations.com/store/item\_display.php?i=3494&f=)
* hand/foot tracing for mitten/moccasin making

likelihood of familiar life events, using comparative language* cycles (Elder or knowledge keeper to speak about ceremonies and life events)

financial literacy — values of coins, and monetary exchanges* trade games, with understanding that objects have variable value or worth (shells, beads, furs, tools)
 | how to participate in different types of physical activities, including individual and dual activities, rhythmic activities, and games* traditional Aboriginal games

caring behaviours in groups and familiescould include:* nurturing
* providing guidance
* loving
* respecting
 | classification of living and non-living things* differences between conventional scientific and indigenous ways of classifying

names of local plants and animals* e.g., common, indigenous and scientific

specific properties of materials allow us to use them in different ways* properties of local materials determine use by First Peoples (local examples: cedar for canoes, mountain goat horns used as spoons, etc.)

common objects in the sky* the sun and the moon are important in different cultures, with respect to customs and traditions
 | characteristics of the local community that provide organization and meet the needs of the communitySample topics* local government
* diverse cultures, backgrounds, and perspectives within the local and other communities:
* different languages, customs, art, music, traditions, holidays, food, clothing, and dress
* relationships between a community and its environment
* How does your community depend on the local environment?
* roles, rights, and responsibilities in the local community
* key events and developments in the local community, and in local First Peoples communities
* cultural events
* What is the most significant event in your local community’s history?
* natural and human-made features of the local environment

diverse cultures, backgrounds, and perspectives within the local and other communities* different languages, customs, art, music, traditions, holidays, food, clothing, and dress

relationship between a community and its environment* How does your community depend on the local environment?

roles, rights, and responsibilities in the local communitynatural and human-made features of the local environment* natural features: mountains, forests, waterways, local plants and animals
 |