

# OpenSchoolBC

## Curriculum Alignment for *We Are of Water*

**PREPARED BY**

Adrian Hill  
Educational Project Manager  
Open School BC

**PREPARED FOR**

Cheyenne Bergenhenegouwen, Communications Manager, Healthy Watersheds BC  
Neil Fletcher, Director of Conservation Stewardship, BC Wildlife Federation

# Curriculum Alignment for *We Are of Water*

## Contents

Applied Design, Skills and Technologies..... 4

Arts Education ..... 7

English Language Arts—Overview ..... 10

English Language Arts—Grades 6-8 ..... 11

English Language Arts—Grades 10-12 ..... 12

English Language Arts—Grade 10 ..... 12

English Language Arts—Grade 11 ..... 13

English Language Arts—Grade 12 ..... 13

English First Peoples—Grade 10 ..... 14

English First Peoples—Grade 11 ..... 15

English First Peoples 12..... 16

Physical and Health Education—Grades 11 and 12 ..... 16

Science ..... 17

Social Studies ..... 19

Appendix A: Additional Curricular Considerations..... 25

Appendix B: Education for Reconciliation ..... 32

## Overview

Open School BC was approached by the BC Wildlife Federation and the Real Estate Foundation of BC to explore how they might promote the graphic novel *We Are of Water* to educators throughout the province. OSBC proposed conducting a high-level curriculum alignment to explore where synergies might be present between the B.C. curriculum and *We Are of Water*, to better understand which subjects might best be aligned to the resource for the purposes of instruction.

Out of necessity due to time constraints, this curriculum alignment to *We Are of Water* focusses solely on the Big Ideas of the curriculum, included within the following subject areas from grades 6 to 12:

- Applied Design, Skills and Technologies
- Arts Education
- English Language Arts
- English First Peoples
- Physical and Health Education
- Science
- Social Studies

## Recommended Audience

OSBC proposes that *We Are of Water* is best suited to students aged 11-18 (grades 6 to 12), due to the language level of the text. Accordingly, the alignment provided is targeted towards middle school and high school-aged students. The main reason for this suggestion concerns the possibility of younger students struggling with the language level of at least some of the writing in the resource. However, elementary teachers could always read the text of *We Are of Water* aloud and use Chenoa Gao's rich illustrations as the basis for a deeper applied inquiry and understanding of its content.

Within B.C.'s redesigned curriculum, beyond the Big Ideas there are further curricular components that include more granular details pertaining to each subject area. For a description of these components, see Appendix A: Additional Curricular Considerations. The B.C. [curriculum website](#) includes links to specific subject areas, where additional curricular information for each subject can be found.

## Indigenous Knowledge and Perspectives

The Ministry of Education and Child Care has created a series of documents that identify connections between various subject areas and Indigenous knowledge and perspectives.

### Indigenous Knowledge and Perspectives in K-12 Curriculum

<https://curriculum.gov.bc.ca/curriculum/indigenous-education-resources/indigenous-knowledge-and-perspectives-k-12-curriculum>

The content within these resources is so detailed and expansive that its inclusion as a part of this document is beyond the scope of this curriculum alignment. Suffice to say that many connections between this material and *We Are of Water* can be made.

## Curriculum Alignment

The curriculum alignment that follows is intended to invoke high-level associations between the big ideas of various subject areas and *We Are of Water*. At times, connections may not be immediately obvious, but are merely inferred. Educators with experience in the various subject areas will possess the pedagogical skills to bring these ideas alive in the classroom and beyond.

## Applied Design, Skills and Technologies

### Grades 6-8

- Design can be responsive to identified needs
- Complex tasks require the acquisition of additional skills
- Complex tasks may require multiple tools and technologies

See the “Content” sections of [ADST 6](#), [ADST 7](#), and [ADST 8](#) for more specific information.

### Grade 9

- Social, ethical, and sustainability considerations impact design
- Complex tasks require the sequencing of skills
- Complex tasks require different technologies at different stages

See the “Content” section of [ADST 9](#) for more specific information.

### Culinary Arts 10

- Social, ethical, and sustainability considerations impact the culinary arts.

See the “Content” section of [Culinary Arts 10](#) for more specific information.

### Food Studies 10

- Social, ethical, and sustainability considerations impact design.

See the “Content” section of [Foods 10](#) for more specific information.

### Media Design 10

- Personal design choices require self-exploration and refinement of skills.
- Social, ethical, and sustainability considerations impact design choices.
- Tools and technology have an impact on people’s lives.

See the “Curricular Competency” and “Content” sections of [Media Design 10](#) for more specific information.

## **Tourism 11**

- Services and products can be designed through consultation and collaboration.

*See the “Content” section of [Tourism 11](#) for more specific information.*

## **Food Studies 11**

- Services and products can be designed through consultation and collaboration.
- Tools and technologies can be adapted for specific purposes.

*See the “Content” section of [Food Studies 11](#) for more specific information.*

## **Graphic Production 11**

- Design for the life cycle includes consideration of social and environmental impacts.
- Design choices require the evaluation and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

*See the “Curricular Competency,” and “Content” sections of [Graphic Production 11](#) for more specific information.*

## **Media Design 11**

- Design for the life cycle includes consideration of social and environmental impacts.
- Personal design choices require self-exploration, evaluation, and the refinement of skills.
- Tools and technologies can influence people’s lives.

*See the “Curricular Competency,” and “Content” sections of [Media Design 11](#) for more specific information.*

## **Tourism 12**

- Services and products can be designed through consultation and collaboration.

*See the “Curricular Competency,” and “Content” sections of [Tourism 12](#) for more specific information.*

## **Culinary Arts 12**

- Service and creativity inform the culinary arts.
- Cuisine design interests require the evaluation and refinement of culinary principles and practices.
- Tools and technologies can be adapted for specific purposes.

*See the “Curricular Competency,” and “Content” sections of [Culinary Arts 12](#) for more specific information.*

## **Food Studies 12**

- Services and products can be designed through consultation and collaboration.
- Personal design interests require the evaluation and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

*See the “Curricular Competency,” and “Content” sections of [Food Studies 12](#) for more specific information.*

## **Housing and Living Environments 12**

- Services and products can be designed through consultation and collaboration.
- Service design interests require the evaluation and refinement of problem-solving skills.
- Tools and technologies can influence communications and relationships.

*See the “Curricular Competency,” and “Content” sections of [Housing and Living Environments 12](#) for more specific information.*

## **Digital Media Development 12**

- The design cycle is an ongoing reflective practice.
- Personal design choices require self-exploration, collaboration, and evaluation and refinement of skills.
- Design and content can influence the lives of others.

*See the “Curricular Competency,” and “Content” sections of [Digital Media Development 12](#) for more specific information.*

## **Graphic Production 12**

- Design for the life cycle includes consideration of social and environmental impacts.
- Design choices require the evaluation and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

*See the “Curricular Competency,” and “Content” sections of [Graphic Production 12](#) for more specific information.*

## **Media Design 12**

- Design for the life cycle includes consideration of social and environmental impacts.
- Personal design choices require self-exploration, collaboration, and evaluation and refinement of skills.
- Tools and technologies can influence people’s lives.

*See the “Curricular Competency,” and “Content” sections of [Media Design 12](#) for more specific information.*

## Arts Education

### Grades 6-8

- Dance, drama, music and visual arts are each unique languages for creating and communicating

### Grade 6

- Engaging in creative expression and experiences expands people's sense of identity and community
- Artistic expressions differ across time and place
- Experiencing art is a means to develop empathy for others' perspectives and experiences

See the "Curricular Competency," and "Content" sections of [Arts Education 6](#) for more specific information.

### Grade 7

- Through art making, one's sense of identity and community continually evolves
- Experiencing art challenges our point of view and expands our understanding of others
- Engaging in the arts develops people's ability to understand and express complex ideas

See the "Curricular Competency," and "Content" sections of [Arts Education 7](#) for more specific information.

### Grade 8

- Individual and collective expression can be achieved through the arts
- Creative growth requires patience, readiness to take risks, and willingness to try new approaches
- Artists often challenge the status quo and open us to new perspectives and experiences

See the "Curricular Competency," and "Content" sections of [Arts Education 8](#) for more specific information.

### Grade 9 (General)

- Identity is explored, expressed, and impacted through arts experiences
- The arts provides opportunities to gain insight into perspectives and experiences of people from a variety of times, places and cultures
- Dance, drama, music and visual arts each use their own unique sensor language for creating and communicating
- Creative arts experiences can build community and nurture relationships with others

See the "Curricular Competency," and "Content" sections of [Arts Education 9](#) for more specific information.

## Media Arts 10

- An artist’s intention transforms media technologies into art.
- Traditions, perspectives, worldviews, and stories can be shared through media arts.
- Growth as an artist requires time, patience, and reflection.
- The creation of media art relies on the interplay of the mind and body.
- Media arts offer unique ways of exploring our identity and sense of belonging.

*See the “Curricular Competency,” and “Content” sections of [Media Arts 10](#) for more specific information.*

## Art Studio 10

- An artist’s intention transforms materials into art.
- Traditions, perspectives, worldviews, and stories are shared through aesthetic experiences.
- Growth as an artist requires time, patience, and reflection.
- The creation of visual art relies on the interplay of the mind and body.
- Visual arts offer unique ways of exploring our identity and sense of belonging.

*See the “Curricular Competency,” and “Content” sections of [Art Studio 10](#) for more specific information.*

## Studio Arts 2D 10

- An artist’s intention transforms materials into art.
- Traditions, perspectives, worldviews, and stories can be shared through aesthetic experiences.
- Growth as an artist requires time, patience, and reflection.
- The creation of artistic works relies on the interplay of body and mind.
- Visual arts offer unique ways of exploring our identity and sense of belonging.

*See the “Curricular Competency,” and “Content” sections of [Studio Arts 2D](#) for more specific information.*

## Media Arts 11

- Media arts reflect the interconnectedness of the individual, community, history, and society.
- Growth as an artist is dependent on perseverance, resilience, refinement, and reflection.
- Artistic expression is an artist’s physical and cognitive articulation of our humanity.
- Media arts provide a unique way to represent self, identity, and culture.

*See the “Curricular Competency,” and “Content” sections of [Media Arts 11](#) for more specific information.*

## Art Studio 11

- An artist’s intention transforms materials into art.
- Visual arts reflect the interconnectedness of the individual, community, history, and society.



- Growth as an artist is dependent on perseverance, resilience, refinement, and reflection.
- Artistic expression is an artist’s physical and cognitive articulation of our humanity.
- Artistic works offer unique aesthetic experiences in a variety of contexts.

*See the “Curricular Competency,” and “Content” sections of [Art Studio 11](#) for more specific information.*

## **Graphic Arts 11**

- An artist’s intention transforms materials into art.
- Graphic arts reflect the interconnectedness of the individual, community, history, and society.
- Growth as an artist is dependent on perseverance, resilience, refinement, and reflection.
- Artistic expression is an artist’s physical and cognitive articulation of our humanity.
- Artistic works offer unique aesthetic experiences in a variety of contexts.

*See the “Curricular Competency,” and “Content” sections of [Graphic Arts 11](#) for more specific information.*

## **Studio Arts 2D 11**

- An artist’s intention transforms materials into art.
- Visual arts reflect the interconnectedness of the individual, community, history, and society.
- Growth as an artist is dependent on perseverance, resilience, refinement, and reflection.
- Artistic expression is an artist’s physical and cognitive articulation of our humanity.
- Two-dimensional works offer unique aesthetic experiences in a variety of contexts.

*See the “Curricular Competency,” and “Content” sections of [Studio Arts 2D 11](#) for more specific information.*

## **Media Arts 12**

- Media arts are an essential element of culture and reveal insights into the human experience.
- Refining artistic expression requires perseverance, resilience, and risk taking.
- Purposeful artistic choices enhance the depth and impact of an artistic work.
- Aesthetic experiences have the power to change our perspective.

*See the “Curricular Competency,” and “Content” sections of [Media Arts 12](#) for more specific information.*

## **Art Studio 12**

- An artist’s intention transforms materials into art.
- Visual arts are an essential element of culture and personal identity.
- Refining artistic expression requires perseverance, resilience, and risk taking.
- Purposeful artistic choices enhance the depth and impact of an artistic work.
- Aesthetic experiences have the power to transform our perspective.

See the “Curricular Competency,” and “Content” sections of [Art Studio 12](#) for more specific information.

## Graphic Arts 12

- An artist’s intention transforms materials into art.
- Graphic arts contribute to culture and reveal insights into the human experience.
- Refining artistic expression requires perseverance, resilience, and risk taking.
- Purposeful artistic choices enhance the depth and meaning of graphic artworks.
- Aesthetic experiences have the power to change our perspective.

See the “Curricular Competency,” and “Content” sections of [Graphic Arts 12](#) for more specific information.

## Studio Arts 2D 12

- An artist’s intention transforms materials into art.
- Visual arts are an essential element of culture and personal identity.
- Refining artistic expression requires perseverance, resilience, and risk taking.
- Purposeful artistic choices enhance depth and meaning in an artistic works.
- Aesthetic experiences have the power to transform our perspective.

See the “Curricular Competency,” and “Content” sections of [Studio Arts 2D 12](#) for more specific information.

## English Language Arts—Overview

The words *text* and *texts* within English Language Arts:

...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 the above.
- Oral, written, and visual elements can be combined (e.g., in dramatic presentations, graphic novels, films, web pages, advertisements).<sup>1</sup>

*We Are of Water* is interesting in that it is a graphic text within which oral narratives have been transcribed and visually contextualized. This treatment could lend itself to stimulating discussion concerning how Indigenous oral traditions have transformed over time, with some oral narrative now

---

<sup>1</sup> <https://curriculum.gov.bc.ca/curriculum/english-language-arts/6/core>

appearing in written form. This could also be an occasion for educators to highlight that some Indigenous knowledge is considered sacred and is only passed down orally to appointed Knowledge Keepers.

Students could explore ways in which comics and graphic novels may be scripted by writers, to be drawn by artists afterwards. Students could also practice utilizing the script format to then draw graphic texts of their own, or render oral narrative into a graphic text format.

The importance of storytelling in Indigenous traditions could be highlighted by educators wishing to draw attention to its advantages in terms of audience engagement (for example, using emotion, intonation and body language to communicate meaning) and as a teaching tool.

The English Language Arts curriculum diverges into various course offerings from grades 10-12, in which emphasis on features of the English language vary from course to course. These courses include:

- Composition
- Creative Writing
- Literary Studies
- New Media
- Spoken Language

## English Language Arts—Grades 6-8

### Grades 6-7

- Exploring and sharing multiple perspectives extends our thinking.
- Developing our understanding of how language works allows us to use it purposefully.

### Grades 6-9

- Language and text can be a source of creativity and joy.
- Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.
- Questioning what we hear, read and view contributes to our ability to be educated and engaged citizens.

### Grades 8-9

- People understand text differently depending on their worldviews and perspectives.
- Texts are socially, culturally, and historically constructed.

See the “Curricular Competency,” and “Content” sections of [English Language Arts 6](#), [English Language Arts 7](#), and [English Language Arts 8](#) for more specific information.

## English Language Arts—Grades 10-12

### Composition 10-12, Creative Writing 10-12, Literary Studies 10-12, New Media 10-12, Spoken Language 10-12

- The exploration of text and story deepens our understanding of diverse, complex ideas about identity, others, and the world.
- Texts are socially, culturally, geographically, and historically constructed.
- Language shapes ideas and influences others.

### Creative Writing 10-12

- Creative writers take risks and persevere.
- Creative writers are observant of the world.

See the “Curricular Competency,” and “Content” sections of [Creative Writing 10](#), [Creative Writing 11](#) and [Creative Writing 12](#) for more specific information.

### Literary Studies 10-12

- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

See the “Curricular Competency,” and “Content” sections of [Literary Studies 10](#), [Literary Studies 11](#) and [Literary Studies 12](#) for more specific information.

### Spoken Language 10-12

- People understand text differently depending on their world views and perspectives.
- Voice is powerful and evocative.

See the “Curricular Competency,” and “Content” sections of [Spoken Language 10](#), [Spoken Language 11](#) and [Spoken Language 12](#) for more specific information.

## English Language Arts—Grade 10

### Composition 10

- Engagement with writing processes can support creativity and enhance clarity of expression.

See the “Curricular Competency,” and “Content” sections of [Composition 10](#) for more specific information.

## **New Media 10**

- People understand text differently depending on their world views and perspectives.
- Digital citizens have rights and responsibilities in an increasingly globalized society.

See the “Curricular Competency,” and “Content” sections of [New Media 10](#) for more specific information.

## **English Language Arts—Grade 11**

### **Composition 11**

- People understand text differently depending on their worldviews and perspectives.
- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.
- People are empowered by being able to communicate effectively.
- Engagement with writing processes can support creativity and enhance clarity of expression.

See the “Curricular Competency,” and “Content” sections of [Composition 11](#) for more specific information.

### **Literary Studies 11**

- People understand text differently depending on their worldviews and perspectives.

See the “Curricular Competency,” and “Content” sections of [Literary Studies 11](#) for more specific information.

### **New Media 11**

- People understand text differently depending on their worldviews and perspectives.
- Digital citizenship requires both knowledge of digital technology and awareness of its impact on individuals and society

See the “Curricular Competency,” and “Content” sections of [New Media 11](#) for more specific information.

## **English Language Arts—Grade 12**

### **Composition 12**

- People understand text differently depending on their worldviews and perspectives.
- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

See the “Curricular Competency,” and “Content” sections of [Composition 12](#) for more specific information.

## **Creative Writing 12**

- Writers write for authentic audiences and real-world purposes

*See the “Curricular Competency,” and “Content” sections of [Creative Writing 12](#) for more specific information.*

## **Literary Studies 12**

- People understand text differently depending on their worldviews and perspectives.

*See the “Curricular Competency,” and “Content” sections of [English First Peoples Literary Studies 10](#) for more specific information.*

## **New Media 12**

- People understand text differently depending on their worldviews and perspectives.
- Digital citizens have rights and responsibilities in an increasingly globalized society

*See the “Curricular Competency,” and “Content” sections of [Literary Studies 12](#) for more specific information.*

# **English First Peoples—Grade 10**

## **Literary Studies 10**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- Texts are socially, culturally, geographically, and historically constructed.
- First Peoples texts and stories provide insight into key aspects of Canada’s past, present, and future.
- Self-representation through authentic First Peoples text is a means to foster justice.
- First Peoples text plays a role within the process of Reconciliation.

*See the “Core Competencies,” “Curricular Competency,” and “Content” sections of [English First Peoples Literary Studies 10](#) for more specific information.*

## **New Media 10**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- Texts are socially, culturally, geographically, and historically constructed.
- Self-representation through authentic First Peoples text is a means to foster justice
- Digital citizens have rights and responsibilities in an increasingly globalized society.

*See the “Curricular Competency,” and “Content” sections of [New Media 10](#) for more specific information.*

## **Spoken Language 10**

- The exploration of oral text and story deepens understanding of one’s identity, others, and the world.
- Voice is powerful and evocative.
- Texts are socially, culturally, geographically, and historically constructed.
- First Peoples oral text plays a role within the process of Reconciliation.

*See the “Curricular Competency,” and “Content” sections of [Spoken Language 10](#) for more specific information.*

## **Writing 10**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- Texts are socially, culturally, geographically, and historically constructed.
- Self-representation through authentic First Peoples text is a means to foster justice.
- First Peoples texts play a role within the process of Reconciliation.

*See the “Curricular Competency,” and “Content” sections of [Writing 10](#) for more specific information.*

## **English First Peoples—Grade 11**

### **EFP: Literary Studies + New Media 11**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- Texts are socially, culturally, geographically, and historically constructed.
- First Peoples texts and stories provide insight into key aspects of Canada’s past, present, and future.
- Self-representation through authentic First Peoples text is a means to foster justice.
- First Peoples literature plays a role within the process of Reconciliation.
- New media influence people’s understandings of community.

*See the “Curricular Competency,” and “Content” sections of [EFP: Literary Studies + New Media 11](#) for more specific information.*

### **EFP: Literary Studies + Spoken Language 11**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- First Peoples texts and stories provide insight into key aspects of Canada’s past, present, and future.
- Voice is powerful and evocative.
- Oral and other texts are socially, culturally, geographically, and historically constructed.
- First peoples voices and texts play a role within the process of Reconciliation.
- Self-representation through authentic First Peoples text is a means to foster justice.

*See the “Curricular Competency,” and “Content” sections of [EFP: Literary Studies + Spoken Language 11](#) for more specific information.*

### **EFP: Literary Studies + Writing 11**

- The exploration of text and story deepens understanding of one’s identity, others, and the world.
- First Peoples texts and stories provide insight into key aspects of Canada’s past, present, and future.
- First peoples voices and texts play a role within the process of Reconciliation.
- People understand text differently depending on their worldviews and perspectives.
- Texts are socially, culturally, geographically, and historically constructed.
- Self-representation through authentic First Peoples text is a means to foster justice.

*See the “Curricular Competency,” and “Content” sections of [EFP: Literary Studies + Writing 11](#) for more specific information.*

### **English First Peoples 12**

- The exploration of text and story deepens our understanding of diverse, complex ideas about identity, others, and the world.
- Oral and other texts are socially, culturally, geographically, and historically constructed.
- Voice is powerful and evocative.
- First Peoples texts and stories provide insight into key aspects of Canada’s past, present, and future.
- Self-representation through authentic First Peoples text is a means to foster justice.
- First Peoples voices and texts play a role within the process of Reconciliation.

*See the “Curricular Competency,” and “Content” sections of [English First Peoples 12](#) for more specific information.*

### **Physical and Health Education—Grades 11 and 12**

Within Physical and Health Education, the most obvious alignment that can be made between the B.C. curriculum and *We Are of Water* is within Outdoor Education 11 and 12. Where spending time on the Land lends itself to an up-close and experiential connection to the natural world, and in particular, bodies of water, educators could make associations between *We Are of Water*, Indigenous uses of local bodies of water, and the importance of conservation and preservation of these areas.

#### **Outdoor Education 11 and 12**

- Participation in outdoor activities allows for the development of skills in a complex and dynamic environment.
- Spending time outdoors allows us to develop an understanding of the natural environment and ourselves.
- Participating safely in outdoor activities requires communication, teamwork, and collaboration.



## **Outdoor Education 12**

- Participation in outdoor activities allows for the development of leadership skills that can be applied in a variety of contexts and environments.

See the “Core Competencies,” “Curricular Competency,” and “Content” sections of [Outdoor Education 11](#) and [Outdoor Education 12](#) for more specific information.

## **Science**

### **Grade 6**

- Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment.
- Everyday materials are often mixtures.

See the “Curricular Competency,” and “Content” sections of [Grade 6 Science](#) for more specific information.

### **Grade 7**

- Evolution by natural selection provides an explanation for the diversity and survival of living things.
- Earth and its climate have changed over geological time.

See the “Curricular Competency,” and “Content” sections of [Grade 7 Science](#) for more specific information.

### **Grade 8**

- Life processes are performed at the cellular level.

See the “Curricular Competency,” and “Content” sections of [Grade 8 Science](#) for more specific information.

### **Grade 9**

- Cells are derived from cells.
- The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them.

See the “Curricular Competency,” and “Content” sections of [Grade 9 Science](#) for more specific information.

## **Grade 10**

- No immediately direct curricular connections

## **Chemistry 11**

- Solubility within a solution is determined by the nature of the solute and the solvent

*See the “Curricular Competency,” and “Content” sections of [Chemistry 11](#) for more specific information.*

## **Earth Sciences 11**

- The transfer of energy through the atmosphere creates weather, and this transfer is affected by climate change.
- The distribution of water has a major influence on weather and climate.
- Astronomy seeks to explain the origin and intersections of Earth and its solar system.

*See the “Curricular Competency,” and “Content” sections of [Earth Sciences 11](#) for more specific information.*

## **Environmental Science 11**

- Complex roles and relationships contribute to the diversity of ecosystems.
- Changing ecosystems are maintained by natural processes.
- Human practices affect the sustainability of ecosystems.
- Humans can play a role in stewardship and restoration of ecosystems.

*See the “Curricular Competency,” and “Content” sections of [Environmental Science 11](#) for more specific information.*

## **Life Sciences 11**

- Life is a result of interactions at the molecular and cellular levels.
- Evolution occurs at the population level.
- Organisms are grouped based on common characteristics.

*See the “Curricular Competency,” and “Content” sections of [Life Sciences 11](#) for more specific information.*

## **Science for Citizens 11**

- Scientific understanding enables humans to respond to changes locally and globally.

*See the “Curricular Competency,” and “Content” sections of [English First Peoples Literary Studies 10](#) for more specific information.*

## **Environmental Science 12**

- Human actions affect the quality of water and its ability to sustain life
- Human activities cause change in the global climate system
- Sustainable land use is essential to meet the needs of a growing population
- Living sustainably supports the well-being of self, community, and Earth

*See the “Curricular Competency,” and “Content” sections of [Environmental Science 12](#) for more specific information.*

## **Geology 12**

- Earth’s geological and biological history is interpreted and inferred from information stored in rock strata and fossil evidence.
- Weathering and erosion processes continually reshape landscapes through the interaction of the geosphere with the hydrosphere and atmosphere.

*See the “Curricular Competency,” and “Content” sections of [Geology 12](#) for more specific information.*

## **Specialized Science 12**

- Biodiversity is dependent on the complex interactions and processes between biotic and abiotic factors.
- Climate change impacts biodiversity and ecosystem health.
- All members of a species have common characteristics that evolve over time.
- Our evolving understanding of genetics has implications for health, society, and environment.

*See the “Curricular Competency,” and “Content” sections of [Specialized Science 12](#) for more specific information.*

# **Social Studies**

## **Grade 6—Global Issues and Governance**

- Economic self-interest can be a significant cause of conflict among peoples and government.
- Complex global problems require international cooperation to make difficult choices for the future.
- Systems of government vary in their respect for human rights and freedoms.
- Media sources can both positively and negatively affect our understanding of important events and issues.

*See the “Curricular Competency,” and “Content” sections of [Social Studies 6](#) for more specific information.*

### **Grade 7—The Ancient World to the 7th Century**

- Geographic conditions shaped the emergence of civilizations.
- Religious and cultural practices that emerged during this period have endured and continue to influence people.
- Increasingly complex societies required new systems of law and government.
- Economic specialization and trade networks can lead to conflict and cooperation between societies.

*See the “Curricular Competency,” and “Content” sections of [Social Studies 7](#) for more specific information.*

### **Grade 8—7th Century to 1750**

- Contacts and conflicts between peoples stimulated significant cultural, social, political change.
- Human and environmental factors shape changes in population and living standards.
- Exploration, expansion, and colonization had varying consequences for different groups.
- Changing ideas about the world created tension between people wanting to adopt new ideas and those wanting to preserve established traditions.

*See the “Curricular Competency,” and “Content” sections of [Social Studies 8](#) for more specific information.*

### **Grade 9—1750 to 1919**

- Emerging ideas and ideologies profoundly influence societies and events.
- The physical environment influences the nature of political, social, and economic changes.
- Disparities in power alter the balance of relationships between individuals and between societies.
- Collective identity is constructed and can change over time.

*See the “Curricular Competency,” and “Content” sections of [Social Studies 9](#) for more specific information.*

### **Grade 10—Canada and the World: 1914 to the Present**

- Global and regional conflicts have been a powerful force in shaping out contemporary world and identities.
- The development of political institutions is influenced by economic, social, ideological, and geographic factors.
- Worldviews lead to different perspectives and ideas about developments in Canadian society.
- Historical and contemporary injustices challenge the narrative and identity of Canada as an inclusive, multicultural society.

*See the “Curricular Competency,” and “Content” sections of [Social Studies 10](#) for more specific information.*

## **Explorations in Social Studies 11**

- Cultural expressions convey the richness, diversity, and resiliency of B.C. First Peoples (from B.C. First Peoples 12)
- Understanding the diversity and complexity of cultural expressions in one culture enhances our understanding of other cultures (from Comparative Cultures 12).
- Physical features and natural resources influence demographic patterns and population distribution (adapted from Human Geography 12).
- Understanding how political decisions are made is critical to being an informed and engaged citizen (from Political Studies 12).
- Indigenous peoples are reclaiming mental, emotional, physical, and spiritual well-being despite the continuing effects of colonialism (from Contemporary Indigenous Studies 12).
- Religion can powerfully shape social, political, legal, and environmental values (from Comparative World Religions 12).
- The implementation of economic theories has profound effects on social and political decision making and movements (from Economic Theory 12).
- The intentional destruction of peoples and their cultures is not inevitable, and such attempts can be disrupted and resisted (from Genocide Studies 12).
- A society's laws and legal framework affect many aspects of people's daily lives (from Law Studies 12).
- Social justice initiatives can transform individuals and systems (from Social Justice 12).
- Decision making in urban and regional planning requires balancing political, economic, social, and environmental factors (from Urban Studies 12).

See the "Curricular Competency," and "Content" sections of [Explorations in Social Studies 11](#) for more specific information.

## **20<sup>th</sup> Century World History 12**

- Nationalist movements can unite people in common causes or lead to intense conflict between different groups.
- The rapid development and proliferation of technology in the 20<sup>th</sup> century led to profound social, economic, and political changes.
- The breakdown of long-standing empires created new economic and political systems.

See the "Curricular Competency," and "Content" sections of [20<sup>th</sup> Century World History 12](#) for more specific information.

## **B.C. First Peoples 12**

- The identities, worldviews, and languages of B.C. First Peoples are renewed, sustained, and transformed through their connection to the land.
- The impact of contact and colonialism continues to affect the political, social, and economic lives of B.C. First Peoples.

- Through self-governance, leadership, and self-determination, B.C. First Peoples challenge and resist Canada’s ongoing colonialism.

See the “Curricular Competency,” and “Content” sections of [B.C. First Peoples 12](#) for more specific information.

### **Comparative Cultures 12**

- Understanding the diversity and complexity of cultural expressions in one culture enhances our understanding of other cultures.
- Interactions between belief systems, social organization, and languages influence artistic expressions of culture.
- Geographic and environmental factors influenced the development of agriculture, trade, and increasingly complex cultures.
- Value systems and belief systems shape the structures of power and authority within a culture.

See the “Curricular Competency,” and “Content” sections of [Comparative Cultures 12](#) for more specific information.

### **Comparative World Religions 12**

- Religious belief, across time and place, is a common aspect of many human societies.
- Religion can powerfully shape social, political, legal, and environmental values.
- Comparing beliefs provides insights into and understanding of diverse global cultures and peoples.
- And individual’s search for existential insight and transcendence can be shaped by a variety of different religious, spiritual, or philosophical traditions.

See the “Curricular Competency,” and “Content” sections of [Comparative World Religions 12](#) for more specific information.

### **Contemporary Indigenous Studies 12**

- The identities, worldviews, and languages of indigenous peoples are renewed, sustained, and transformed through their connection to the land.
- Indigenous peoples are reclaiming mental, emotional, physical, and spiritual well-being despite the continuing effects of colonialism.
- Indigenous peoples continue to advocate and assert the rights to self-determination.
- Reconciliation requires all colonial societies to work together to foster healing and address injustices.

See the “Curricular Competency,” and “Content” sections of [Contemporary Indigenous Studies 12](#) for more specific information.

## **Economic Theory 12**

- Contemporary economic theory, practice, and terminology are grounded in centuries of economic theory.
- Observing, interpreting, and judging past economic conditions from different perspectives and worldviews gave rise to competing theoretical approaches.
- The implementation of economic theories has profound effects on social and political decision making and movements.
- Economic systems have underlying and often opposing ethical standards and implications.

*See the “Curricular Competency,” and “Content” sections of [Economic Theory 12](#) for more specific information.*

## **Genocide Studies 12**

- The intentional destruction of peoples and their cultures is not inevitable, and such attempts can be disrupted and resisted.
- The use of the term “genocide” to describe atrocities has political, legal, social, and cultural ramifications.
- Despite international commitments to prohibit genocide, violence targeted against groups of people has continued to challenge global peace and prosperity.
- While genocides are caused by and carried out for different reasons, all genocides share similarities in progression and scope.

*See the “Curricular Competency,” and “Content” sections of [Genocide Studies 12](#) for more specific information.*

## **Human Geography 12**

- Analyzing data from a variety of sources allows us to better understand our globally connected world.
- Demographic patterns and population distribution are influenced by physical features and natural resources.
- Human activities alter landscapes in a variety of ways.
- A geographical region can encompass a variety of physical features and/or human interactions.

*See the “Curricular Competency,” and “Content” sections of [Human Geography 12](#) for more specific information.*

## **Law Studies 12**

- Understanding legal rights and responsibilities allows citizens to participate more fully in society.
- Laws can maintain the status quo and can also be a force for change.
- A society’s laws and legal framework affect many aspects of people’s daily lives.
- Laws are interpreted, and these interpretations may evolve over time as a society’s values and worldviews change.

See the “Curricular Competency,” and “Content” sections of [Law Studies 12](#) for more specific information.

### **Political Studies 12**

- Understanding how political decisions are made is critical to being an informed and engaged citizen.
- Political institutions and ideology shape both the exercise of power and the nature of political outcomes.
- Decision making in a democratic system of government is influenced by the distribution of political and social power.

See the “Curricular Competency,” and “Content” sections of [Political Studies 12](#) for more specific information.

### **Social Justice 12**

- Social justice issues are interconnected.
- Individual worldviews shape and inform our understanding of social justice issues.
- The causes of social injustice are complex and have lasting impacts on society.
- Social justice initiatives can transform individuals and systems.

See the “Curricular Competency,” and “Content” sections of [Social Justice 12](#) for more specific information.

### **Urban Studies 12**

- Urbanization is a critical force that shapes both human life and the planet.
- The historical development of cities has been shaped by geographic, economic, political, and social factors.
- Decision making in urban and regional planning requires balancing political, economic, social, and environmental factors.
- Urban planning decisions and other government policies can dramatically affect the overall quality of life in cities.

See the “Curricular Competency,” and “Content” sections of [Urban Studies 12](#) for more specific information.



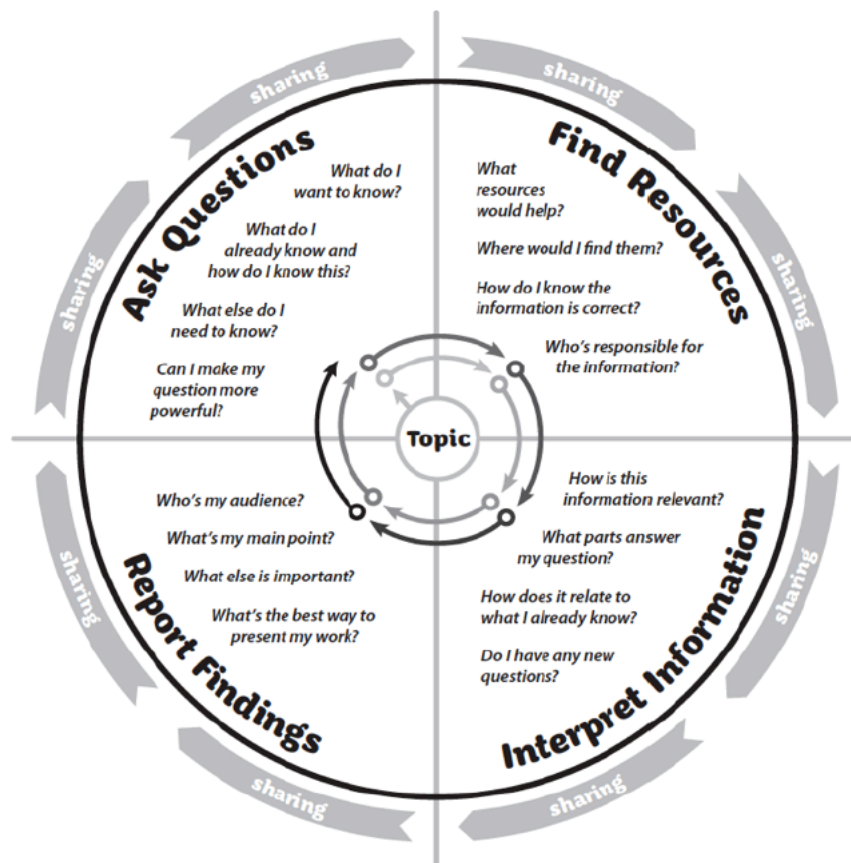
## Appendix A: Additional Curricular Considerations

The following information is included to provide a variety of pedagogical perspectives on how *We Are of Water* may be used in conjunction with the B.C. Curriculum.

### Inquiry-based Learning and Universal Design for Learning

“Alternative” educators have advocated using inquiry-based approaches to learning since at least the early 20<sup>th</sup> century, if not before. More recently, Garth Boomer’s prescient *Negotiating the Curriculum: Educating for the 21<sup>st</sup> Century* (1992) framed curriculum as *process* by inviting students to explore the following questions in relation to topics of inquiry:

- What do I want to know?
- What do I know about this subject already?
- How am I going to find out what I want to know?
- How will I share what I’ve learned with others?



Iterative process of inquiry-based learning

B.C.'s curriculum is well poised to support an inquiry-based approach to learning, as well as the principles of Universal Design for Learning (UDL) and inclusive design. Inclusive design is understood as "...design that considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference."<sup>2</sup>

UDL and inclusive design encourage the use of:

- *Multiple means of representation* for learners to acquire knowledge and information
- *Multiple means of expression* for learners to show what they know
- *Multiple means of engagement* for learners to appropriately interest, motivate, engage, and challenge learners

In terms of the structure of the B.C. curriculum, *We Are of Water* could be considered a "big idea" in its own right that could serve as a starting point for any number of related inquiries (see the "Curriculum connections" section that follows further in this document).

### **First Peoples Principles of Learning**

The First Peoples Principles of Learning is a holistic framework initially created in tandem with English 12 First Peoples, a course jointly developed by the First Nations Steering Committee and the BC Ministry of Education. Though they do not reflect the unique cultural differences of individual First Nations, these principles describe practices and values embedded within First Peoples approaches to teaching and learning:

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning involves generational roles and responsibilities.
- Learning recognizes the role of indigenous knowledge.
- Learning is embedded in memory, history, and story.
- Learning involves patience and time.
- Learning requires exploration of one's identity
- Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.

<http://www.fnesc.ca/wp/wp-content/uploads/2015/09/PUB-LFP-POSTER-Principles-of-Learning-First-Peoples-poster-11x17.pdf>

The First Peoples Principles of Learning can arguably connect to every lesson that may be included in *We Are of Water*. It is recommended that any authors of *We Are of Water* lesson material strive to employ approaches to teaching and learning that align to one or more principles throughout.

### **Place-based Education**

---

<sup>2</sup> Jess Mitchell, "Inclusive Design Webinar Series Part 1: Inclusive Design." BCcampus. [https://video.bccampus.ca/media/Inclusive+Design+Webinar+Series+Part+1A+Inclusive+Design/0\\_vo0at97w](https://video.bccampus.ca/media/Inclusive+Design+Webinar+Series+Part+1A+Inclusive+Design/0_vo0at97w)

Place-based education is “...sometimes called pedagogy of place, place-based learning, experiential education, education for sustainability, environmental education or more rarely, service learning<sup>3</sup>. Place-based education encourages learners to explore their geographical, environmental, and ecological context *as curriculum*. In this view, learning is embedded in an understanding of one’s relationship to the land and its human and non-human inhabitants.

In particular in the spirit of Reconciliation, it is incumbent upon educators to honour Calls to Action # 62–64 of the Truth and Reconciliation Commission of Canada (see “Appendix B: Education for Reconciliation”).

A connection to the local environment is explicitly embodied in two of the First Peoples Principles of Learning:

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).

Any *We Are of Water* educational resources to be developed will inevitably incorporate Indigenous perspectives throughout lesson material, since the transcribed oral narratives within the resource communicated by Indigenous peoples.

### **Powerful Questions**

The qualities of a powerful questions include:

- Not possessing a yes/no answer, a “right” answer or just one answer (a multiplicity of possible responses)
- Leading to more questions
- Engaging more than just the intellect, including emotional and visceral responses, as well as inviting values-based thinking
- Inviting debate
- Inviting pause and change
- Being asked questions within specific contexts, related to exploring various perspectives

Powerful questions could also lead to action, in the form of students promoting awareness within their school about the local conservation efforts, climate impacts and so on.

### **Flexible Learning**

The use of inquiry-based learning and place-based education is consistent with the Ministry of Education and Child Care’s mandate, which highlights the transformative potential of flexible learning and innovation in education:

Learning can take place anywhere, not just in classrooms. Many schools and teachers create learning environments that explore the use of time and space in creative ways. The integration

---

<sup>3</sup> “Place-based education,” Wikipedia, accessed Oct. 31, 2017). [https://en.wikipedia.org/wiki/Place-based\\_education](https://en.wikipedia.org/wiki/Place-based_education)

of areas of learning and technology also have opened the door for teachers and schools to approach the use of time and space in creative ways – ways that adapt to students’ needs and interests.

Although the learning standards are described within areas of learning, there is no requirement for teachers to organize classrooms, schools, or instruction in this manner. In effect, the Ministry of Education defines the “what” to teach but not the “how” to organize the time, space or methods to teach it.

The focus on personalization and the flexible structure of the curriculum support the configuration of combined-grade classrooms. Classes of students of more than one grade provide opportunities for teachers to develop a mindset that sees all the students as a group of learners with a range of needs and interests. Multi-grade programs should find a comfortable fit with the curriculum.

<https://curriculum.gov.bc.ca/rethinking-curriculum>

Flexible learning is one of four high-level goals identified within the education transformation initiative, the other three being personalized learning, quality teaching and learning, and high standards.

### **Curriculum Connections**

The BC K–12 curriculum is comprised of:

- Three cross-curricular “core competencies” that address intellectual, personal and social development “...for success in life beyond school,” and
- Three principal areas of learning “based on a ‘Know-Do-Understand’ model to support a concept-based competency-driven approach to learning.”

<https://curriculum.gov.bc.ca/rethinking-curriculum>

### **Core competencies**

The three “core competencies” (not to be confused with “curricular competencies”; see below) are communication, thinking and personal and social competencies. The core competencies complement and serve as the backbone to the curriculum model; they apply to all areas of life, not just schooling.

The core competencies serve two primary functions:

- They enable and encourage students to bring agency to their learning. For example, a description of the creative thinking competency explains that “Students are enabled to think creatively through opportunities that allow them to take initiative, exercise choice, explore ideas and options, question and challenge, make connections, and imagine and visualize the possibilities” (*Defining Cross-Curricular Competencies*, page 6).
- They offer teachers pedagogical licence to exercise professional autonomy with their students. For example, the description of the creative thinking competency also explains that “Teachers can foster creative thinking by welcoming students’ unexpected answers, questions, and suggestions; delaying judgment until students’ ideas have been thoroughly explored and expressed; offering students opportunities to work with diverse materials in various ways; and supporting and scaffolding students as they explore new and unusual ideas” (*Defining Cross-Curricular Competencies*, page 6).

The core competencies are informed by what it means to be an “educated citizen” (<https://www2.gov.bc.ca/gov/content/education-training/k-12/administration/program-management/vision-for-student-success>) and are designed to contribute to “deeper learning.”

Within the core competencies, the following subcategories have been identified:

- Thinking is subdivided into critical thinking, creative thinking, and reflective thinking.
- Personal and social competency is subdivided into positive personal and cultural identity, personal awareness and responsibility, and social awareness and responsibility.
- Within the Ministry of Education and Child Care’s definition, communication and collaboration combine to encompass the entirety of the communication core competency.

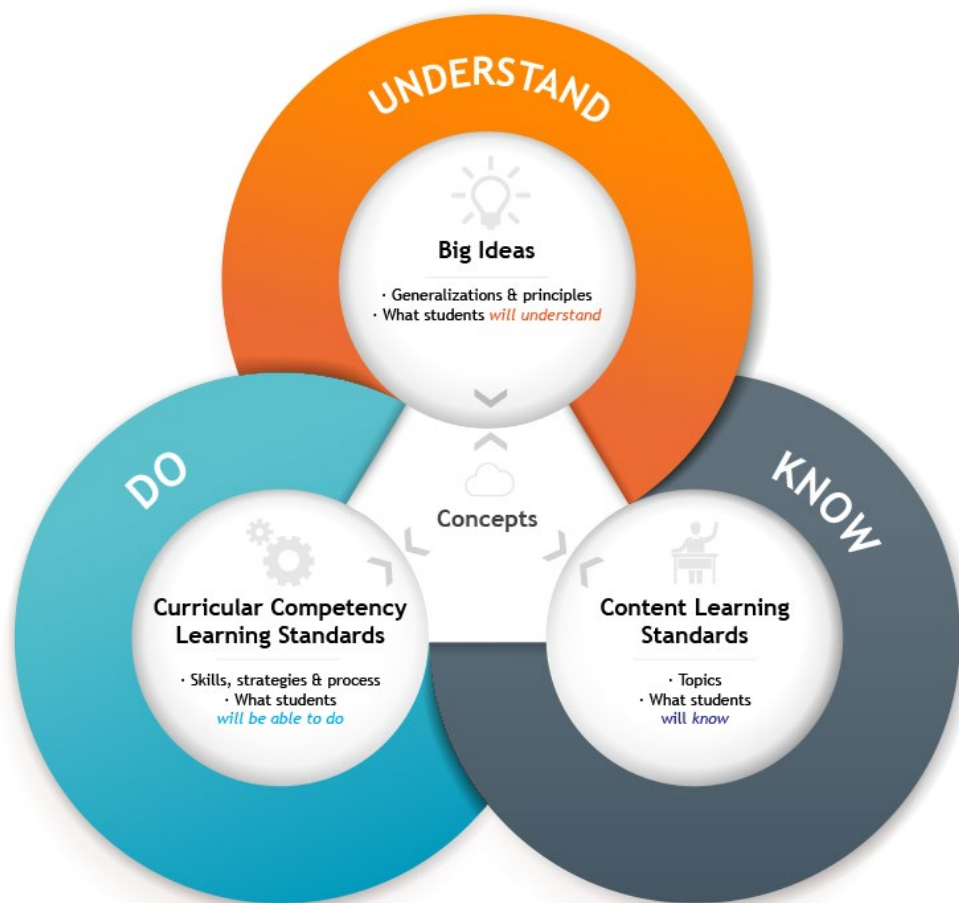
The core competencies are designed to inform one another and be contextualized holistically. For example, even though creative thinking is identified as a thinking competency and creative expression is identified as a communication competency, they are not intended to be treated in isolation.

### **Curriculum model (areas of learning)**

The three principal areas of learning identified in the curriculum are described as big ideas, curricular competencies and content. Each of the three areas is linked to a means through which the learning in question may be realized: namely and respectively, to know, to do, and to understand. Taken collectively, these three areas of learning are also recognized as supporting “deeper learning.” (<https://curriculum.gov.bc.ca/rethinking-curriculum>).

### **Big ideas (Understand)**

Within the context of the BC K–12 curriculum, “big ideas” (to understand) serve as a unifying thread across the curriculum for all the subject areas, though not all subject areas include a linear scope and sequence that connects big ideas together within a subject domain. Big ideas “...consist of generalizations and principles and the key concepts important in an area of learning.” (<https://curriculum.gov.bc.ca/rethinking-curriculum>). The big ideas serve as generalities that speak to human understandings. Toward that end, as previously mentioned, the big ideas are an effective vehicle to connect *We Are of Water* to the B.C. curriculum.



### Learning Standards (Do and Know)

Learning standards within the curriculum are comprised of two parts: “curricular competency learning standards” and “content learning standards.” Curricular competencies identify the skills and processes that students are expected to use to know specific content in a subject area. Content is described as detailing “...the essential topics and knowledge at each grade level.” Curricular competencies (to do) “...are the skills, strategies, and processes that students develop over time.”

For the purposes of *We Are of Water*, it is important to recognize that:

- Where applicable, teachers may conduct an alignment to all aspects of the curriculum: the core competencies, big ideas, curricular competencies and content.
- Teachers don’t have to conduct an alignment to all of the subject areas identified as most amenable to creating curricular connections.
- Teachers don’t have to conduct an alignment to all the Learning Standards within a chosen subject area in their entirety.
- Teachers can add to the curriculum. For example, if there are themes or key terminology that are not captured within B.C.’s curriculum framework, they may nonetheless be highlighted as important material to understand various aspects of *We Are of Water*. This may occur through

the identification of specific lesson objectives that describe what a student will be expected to know, do and understand by its end.

### **Assessment**

Where applicable, assessment and evaluation strategies may predominantly focus on inquiry- and question-based approaches to learning, including:

- Inquiry learning
- Project-based learning
- Problem-based learning
- Self-assessment
- Peer assessment

Research skills

- Scientific inquiry

Further assessment suggestions can be found on pages 24–26 of the *Science First Peoples Teacher Resource Guide: Grades 5–9*, including information on the “7E model,” which can be effectively applied to experiential learning. The seven Es are: Environment, Engage, Explore, Elders, Explain, Elaborate and Evaluation.

## Appendix B: Education for Reconciliation

Retrieved on July 12, 2019 from: [http://trc.ca/assets/pdf/Calls\\_to\\_Action\\_English2.pdf](http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf)

62. We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to:

- i. Make age-appropriate curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada a mandatory education requirement for Kindergarten to Grade Twelve students.
- ii. Provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms.
- iii. Provide the necessary funding to Aboriginal schools to utilize Indigenous knowledge and teaching methods in classrooms.
- iv. Establish senior-level positions in government at the assistant deputy minister level or higher dedicated to Aboriginal content in education.

63. We call upon the Council of Ministers of Education, Canada to maintain an annual commitment to Aboriginal education issues, including:

- i. Developing and implementing Kindergarten to Grade Twelve curriculum and learning resources on Aboriginal peoples in Canadian history, and the history and legacy of residential schools.
- ii. Sharing information and best practices on teaching curriculum related to residential schools and Aboriginal history.
- iii. Building student capacity for intercultural understanding, empathy, and mutual respect.
- iv. Identifying teacher-training needs relating to the above.

64. We call upon all levels of government that provide public funds to denominational schools to require such schools to provide an education on comparative religious studies, which must include a segment on Aboriginal spiritual beliefs and practices developed in collaboration with Aboriginal Elders.