

## Cross-curricular Competencies (September 24, 2010)

Although described separately, the cross-curricular competencies (i.e., Thinking, Identity and Interdependence, Literacies, and Social Responsibility) are interrelated. They are intended to embrace the Common Essential Learnings and support student achievement of subject area outcomes and, ultimately, the provincial Goals of Education (as expressed through the Broad Areas of Learning). These competencies will “strengthen and enrich students’ present learning and future lives” (Saskatchewan Education, 1988, p. 11).

The competencies are addressed through all areas of study and through school and classroom routines, relationships, and environments. Such inclusive, culturally diverse, resource-rich environments include increasingly networked, technology-rich classrooms.

Each cross-curricular competency has three K-12 goals:

- Goals to develop Thinking are:
  - Think and learn contextually
  - Think and learn creatively
  - Think and learn critically.
- Goals to develop Identity and Interdependence are:
  - Understand, value, and care for oneself (intellectually, emotionally, physically, spiritually)
  - Understand, value, and care for others
  - Understand and value social, economic, and environmental interdependence and sustainability.
- Goals to develop Literacies are:
  - Construct knowledge related to various literacies
  - Explore and interpret the world using various literacies
  - Express understanding and communicate meaning using various literacies.
- Goals to develop Social Responsibility are:
  - Use moral reasoning processes
  - Engage in communitarian thinking<sup>1</sup> and dialogue
  - Take social action.

These interrelated K-12 goals express the breadth of each competency. The outcomes listed below each goal on the following pages show what students will know, understand, and be able to do related to a particular goal at the end of each grade in each area of study. Such knowledge (factual, conceptual, procedural, metacognitive) can be demonstrated in developmentally appropriate ways. (See Appendix for definitions of knowledge dimensions). Embedded within these four competencies is the effective use of technology for teaching and learning. In addition, foundational to the Cross-curricular Competencies are Indigenous epistemologies.

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<sup>1</sup> Communitarian thinking is the ability to “think with” others, learn from others, and support the thinking of others. For further information, see the *Renewed Objectives for the CELs of Critical and Creative Thinking and Personal and Social Development* (2008).

## Developing Thinking (Related to CEL of Critical and Creative Thinking)

Constructing knowledge (i.e., factual, conceptual, procedural, and metacognitive) is how people come to know and understand the world around them. Deep understanding develops through thinking and learning contextually, creatively, and critically in a variety of situations, both independently and with others.

<p><b>K-12 Goal: Think and learn contextually</b></p> <ul style="list-style-type: none"> <li>➤ Apply prior knowledge, experiences, and the ideas of self and others in new contexts</li> <li>➤ Analyze connections or relationships within and/or among ideas, experiences, or natural and constructed objects</li> <li>➤ Recognize that a context is a complex whole made of parts</li> <li>➤ Analyze a particular context for the ways that parts influence each other and create the whole</li> <li>➤ Explore norms<sup>2</sup>, concepts, situations, and experiences from several perspectives, theoretical frameworks, and worldviews.</li> </ul>
<p><b>K-12 Goal: Think and learn creatively</b></p> <ul style="list-style-type: none"> <li>➤ Show curiosity and interest in the world, new experiences, materials, and puzzling or surprising events</li> <li>➤ Experiment with ideas, hypotheses, educated guesses, and intuitive thoughts</li> <li>➤ Explore complex systems and issues using a variety of approaches such as models, simulations, movement, self-reflection, and inquiry</li> <li>➤ Create or re-design objects, designs, models, patterns, relationships, or ideas by adding, changing, removing, combining, and separating elements</li> <li>➤ Imagine and create central images or metaphors for subject area content or cross-disciplinary ideas.</li> </ul>
<p><b>K-12 Goal: Think and learn critically</b></p> <ul style="list-style-type: none"> <li>➤ Analyze and critique objects, events, experiences, ideas, theories, expressions, situations, and other phenomena</li> <li>➤ Distinguish among facts, opinions, beliefs, and preferences</li> <li>➤ Apply various criteria to assess ideas, evidence, arguments, motives, and actions</li> <li>➤ Apply, evaluate, and respond to differing strategies for solving problems and making decisions</li> <li>➤ Analyze factors that influence self and others' assumptions and abilities to think deeply, clearly, and fairly.</li> </ul>

<sup>2</sup> Norms can include unexamined privilege (i.e., unearned rights/entitlements/immunity/exemptions associated with being “normal”) which creates a power imbalance gained by birth, social position, or concession and provides a particular context.

## Developing Identity and Interdependence (related to CELs of Personal and Social Development and Technological Literacy)

Identity develops as an individual interacts with others and the environment, and learns from various life experiences. The development of a positive self-concept, the ability to live in harmony with others, and the capacity and aptitude to make responsible decisions about the natural and constructed world supports the concept of interdependence. The focus within this competency is to foster personal reflection and growth, care for others, and the ability to contribute to a sustainable future.

<p>K-12 Goal: Understand, value, and care for oneself (intellectually, emotionally, physically, spiritually)</p> <ul style="list-style-type: none"> <li>➤ Recognize that cultural and linguistic backgrounds, norms, and experiences influence identity, beliefs, values, and behaviours</li> <li>➤ Develop skills, understandings, and confidence to make conscious choices that contribute to the development of a healthy, positive self-identity</li> <li>➤ Analyze family, community, and societal influences (such as recognized and unrecognized privileges) on the development of identity</li> <li>➤ Demonstrate self-reliance, self-regulation, and the ability to act with integrity</li> <li>➤ Develop personal commitment and the capacity to advocate for self.</li> </ul>
<p>K-12 Goal: Understand, value, and care for others</p> <ul style="list-style-type: none"> <li>➤ Demonstrate openmindedness<sup>3</sup> toward, and respect for, all</li> <li>➤ Learn about various peoples and cultures</li> <li>➤ Recognize and respect that people have values and worldviews that may or may not align with one's own values and beliefs</li> <li>➤ Value the varied abilities and interests of individuals to make positive contributions to society</li> <li>➤ Advocate for the well-being of others.</li> </ul>
<p>K-12 Goal: Understand and value social, economic, and environmental interdependence and sustainability<sup>4</sup></p> <ul style="list-style-type: none"> <li>➤ Examine the influence of worldviews on one's understanding of interdependence in the natural and constructed world</li> <li>➤ Evaluate how sustainable development depends on the effective and complex interaction of social, environmental, and economic factors</li> <li>➤ Analyze how one's thinking, choices, and behaviours affect living and non-living things, now and in the future</li> <li>➤ Investigate the potential of individual and group actions and contributions to sustainable development</li> <li>➤ Demonstrate a commitment to behaviours that contribute to the well-being of the society, environment, and economy – locally, nationally, and globally.</li> </ul>

<sup>3</sup> Openmindedness refers to a mind that is open to new ideas, and free from prejudice or bias in order to develop an "ethical space" between an existing idea and a new idea (Ermine).

<sup>4</sup> Sustainability refers to making informed decisions for the benefit of ourselves and others, now and for the future, and to act upon those decisions for social, economic, and environmental well-being.

## Developing Literacies (Related to CELs of Communication, Numeracy, Technological Literacy, and Independent Learning)

Literacies provide many ways to interpret the world and express understanding of it. Being literate involves applying interrelated knowledge, skills, and strategies to learn and communicate with others. Communication in a globalized world is increasingly multimodal. Communication and meaning making, therefore, require the use and understanding of multiple modes of representation. Each area of study develops disciplinary literacies (e.g., scientific, economic, physical, health, linguistic, numeric, aesthetic, technological, cultural) and requires the understanding and application of multiple literacies (i.e., the ability to understand, critically evaluate, and communicate in multiple meaning making systems) in order for students to participate fully in a constantly changing world.

<p><b>K-12 Goal: Construct knowledge related to various literacies</b></p> <ul style="list-style-type: none"> <li>➤ Acknowledge the importance of multiple literacies in everyday life</li> <li>➤ Understand that literacies can involve words, images, numbers, sounds, movements, and other representations and that these can have different interpretations and meanings</li> <li>➤ Examine the interrelationships between literacies and knowledge, culture, and values</li> <li>➤ Evaluate the ideas and information found in a variety of sources (e.g., people, databases, natural and constructed environments)</li> <li>➤ Access and use appropriate technologies to investigate ideas and deepen understanding in all areas of study.</li> </ul>
<p><b>K-12 Goal: Explore and interpret the world using various literacies</b></p> <ul style="list-style-type: none"> <li>➤ Inquire and make sense of ideas and experiences using a variety of strategies, perspectives, resources, and technologies</li> <li>➤ Select and critically evaluate information sources and tools (including digital) based on the appropriateness to specific tasks</li> <li>➤ Use various literacies to challenge and question understandings and interpretations</li> <li>➤ Interpret qualitative and quantitative data (including personally collected data) found in textual, aural, and visual information gathered from various media sources</li> <li>➤ Use ideas and technologies in ways that contribute to creating new insight.</li> </ul>
<p><b>K-12 Goal: Express understanding and communicate meaning using various literacies</b></p> <ul style="list-style-type: none"> <li>➤ Create, compute, and communicate using a variety of materials, strategies, and technologies to express understanding of ideas and experiences</li> <li>➤ Respond responsibly and ethically to others using various literacies</li> <li>➤ Determine and use the languages, concepts, and processes that are particular to a discipline when developing ideas and presentations</li> <li>➤ Communicate ideas, experiences, and information in ways that are inclusive, understandable, and useful to others</li> <li>➤ Select and use appropriate technologies in order to communicate effectively and ethically.</li> </ul>

## Developing Social Responsibility (Related to CELs of Communication, Critical and Creative Thinking, Personal and Social Development, and Independent Learning)

Social responsibility is the ability of people to contribute positively to their physical, social, and cultural environments. It requires an awareness of unique gifts and challenges among individuals and communities and the resulting opportunities that can arise. It also requires participation with others in creating an ethical space<sup>5</sup> to engage in dialogue, address mutual concerns, and accomplish shared goals.

<p><b>K-12 Goal: Use moral reasoning processes</b></p> <ul style="list-style-type: none"> <li>➤ Evaluate the possible consequences of a course of action on self, others, and the environment in a particular situation</li> <li>➤ Consider the implications of a course of action when applied to other situations</li> <li>➤ Consistently apply fundamental moral values<sup>6</sup> such as “respect for all”</li> <li>➤ Demonstrate a principle-based approach to moral reasoning</li> <li>➤ Examine how values and principles have been and continue to be used by persons and cultures to guide conduct and behaviour.</li> </ul>
<p><b>K-12 Goal: Engage in communitarian thinking and dialogue</b></p> <ul style="list-style-type: none"> <li>➤ Model a balance in speaking, listening, and reflecting</li> <li>➤ Ensure that each person has an opportunity to contribute</li> <li>➤ Demonstrate courage to express differing perspectives in a constructive manner</li> <li>➤ Use consensus-building strategies to work towards shared understanding</li> <li>➤ Be sensitive to, and respectful of, diversity and different ways of participating.</li> </ul>
<p><b>K-12 Goal: Take social action</b></p> <ul style="list-style-type: none"> <li>➤ Demonstrate respect for and commitment to human rights, treaty rights, and environmental sustainability</li> <li>➤ Contribute to harmony and conflict resolution in own classroom, school, family, and community</li> <li>➤ Provide support in a manner that is respectful of the needs, identity, culture, dignity, and capabilities of all persons</li> <li>➤ Support individuals in making contributions toward achieving a goal</li> <li>➤ Take responsible action to change perceived inequities or injustice for self and others.</li> </ul>

<sup>5</sup> An ethical space exists between separate worldviews. In this space, “we can understand one another’s knowledge systems” (Ermine, 2006). For further information, see Willie Ermine’s work related to ethical space.

<sup>6</sup> The most basic moral value underlying development of the CEL of Personal and Social Development is that of respect for persons. For further discussion related to fundamental moral values, refer to *Understanding the Common Essential Learnings: A Handbook for Teachers* (1988, pages 42-49). See also the *Renewed Objectives for the CELs of Critical and Creative Thinking and Personal and Social Development* (2008).

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## Appendix: Knowledge Dimensions

1. **Factual Knowledge** is knowledge that is basic to specific disciplines. This dimension refers to essential facts, terminology, details, or elements students must know or be familiar with in order to understand a discipline or solve a problem in it.
2. **Conceptual Knowledge** is knowledge of classifications, principles, generalizations, theories, models, or structures pertinent to a particular disciplinary area.
3. **Procedural Knowledge** refers to information or knowledge that helps students to do something specific to a discipline, subject, or area of study. It also refers to methods of inquiry, very specific or finite skills, algorithms, techniques, and particular methodologies.
4. **Metacognitive Knowledge** is the awareness of one's own cognition and particular cognitive processes. It is strategic or reflective knowledge about how to go about solving problems or engaging in cognitive tasks while including contextual and conditional knowledge and knowledge of self.

Source: Anderson, Krathwohl, et al. (2000).