



MINISTRY OF EDUCATION

Exploring Curriculum Design

Transforming Curriculum and Assessment

January 2013

This document describes the progress to date of BC's curriculum transformation and outlines the next steps. It builds on the information presented in [*Enabling Innovation: Transforming Curriculum and Assessment*](#). The document is intended to encourage dialogue and discussion about student learning in British Columbia. Your feedback is invited.

Timeline

The following outlines the work done to date and proposes a timeline for future developments:

Curriculum and Assessment Framework Advisory Group	December 2011 to April 2012
Regional Sessions	February to June 2012
<i>Enabling Innovation</i> document released	Summer 2012
Curriculum design meetings with subject-matter experts in English Language Arts, Social Studies, Science, Arts Education, Math, and Health/Career/PE.	Summer/Fall 2012
Initial design to field for review and feedback	January 2013
Establish Standing Committee on Provincial Curriculum	January 2013
Post cross-curricular competencies definition paper	January 2013
Co-development with districts and field-based educators <ul style="list-style-type: none">• Curriculum• Cross-curricular competency continua• Demonstrations of learning; Inquiries	January to June 2013 (grades K-10) September 2013 to March 2014 (grades 11-12)
Establish advisory groups on provincial assessment	February 2013
Post web-based, interactive prototypes for review	Winter/Spring 2013
Conduct classroom trials/refinement	September 2013 to June 2014 (grades K-10) April to December 2014 (grades 11-12)

Background and Consultation

In 2010, the province began a process to transform education in BC to better meet the needs of all learners. Transforming a system as complex as education takes time and to do it well involves extensive ongoing consultation, thorough research and exploration of possibilities, and detailed planning.

Over the past two years, the Province used a variety of processes to consult broadly and gather advice about the best direction to take. There have been formal and informal consultations with provincial partners, school district-hosted sessions with local stakeholders, provincial and regional conferences and meetings, conversations with international experts, and online dialogue. These consultations have been complemented by inquiries into wise practices in BC as well as the review of transformation plans from other parts of Canada and the world. In addition, in the fall of 2011, stakeholders were invited to respond to the directions and actions set out in the *BC Education Plan*, available at: <http://www.bcedplan.ca>

In November 2011, a Curriculum and Assessment Framework Advisory Group, composed of BC educators, was formed to provide advice on directions for curriculum and assessment. In the spring of 2012, the province held 12 regional working sessions to present ideas from the advisory group and to gather feedback from participants. The recommendations from the Advisory Group and the feedback from the regional sessions were summarized in *Enabling Innovation: Transforming Curriculum and Assessment (August 2012)* available at: www.bced.gov.bc.ca/irp/docs/ca_transformation.pdf

Guiding Principles for Future Curriculum Development

The discussions and consultations led to the following set of guiding principles for the future development of provincial curricula designed to be concept-based and competency driven:

- Make curriculum more flexible to better enable teachers to innovate and personalize learning.
- Reduce the prescriptive nature of current curricula while ensuring a solid focus on essential learning.
- Focus new curricula on higher order learning, giving emphasis to the key concepts and enduring understandings (big ideas) that students need to succeed in their education and their lives.
- Make explicit the cross-curricular competencies that support life-long learning.
- Respect the inherent logic and unique nature of the disciplines while supporting efforts to develop cross-curricular units.
- Integrate Aboriginal worldviews and knowledge.
- Develop assessment and evaluation programs that align with the changed emphases in curriculum.

Consideration of these principles led to the development of a curriculum prototype with five design elements (curriculum organizers, big ideas (enduring understandings), learning standards, competency links, and implementation links). These elements, along with fewer outcomes, were intended to make a more flexible curriculum that is less prescriptive while giving more focus to higher order learning.

Educators, administrators and other stakeholders were asked to review and respond to this prototype in a series of regional sessions. Generally, feedback was positive about these directions for curriculum, with many participants commenting on the amount of openness and flexibility compared with current curriculum. Based on this feedback, more detailed consultations with many more educators took place, this time looking at specific subject areas.

A set of cross-curricular competencies seen as central to life-long learning were proposed to play an important role in curriculum, assessment, reporting and graduation. These cross-curricular competencies have been grouped into three categories: Thinking, Communication, and Personal and Social Cross-curricular Competencies. Researchers developed summaries of recent literature on each cross-curricular competency and the Ministry consulted with provincial Aboriginal scholars to help build definitions to inform development in both curriculum and assessment. Draft definitions for the cross-curricular competencies are outlined in the *Defining Cross-Curricular Competencies* document, available online at: http://www.bced.gov.bc.ca/irp/transforming_curriculum.php

It is recognized that British Columbia schools serve students from diverse cultures and backgrounds. The multicultural nature of the BC school system is highly valued, and all students' heritages and cultures are valued. The inclusion of Aboriginal perspectives and knowledge specifically in the Guiding Principles for New Curriculum is based on the understanding that Aboriginal perspectives and knowledge are a part of the historical and contemporary foundation of BC and Canada. The integration of Aboriginal perspectives and knowledge in the curriculum serves as an important step to begin to address misunderstanding of Aboriginal cultures. With a more in-depth knowledge of Aboriginal people and their history, all students in British Columbia will have a foundation for developing mutual understanding and respect.

Even though provincial assessment and reporting were not fully discussed at the various consultations and meetings, it was evident that there is a need to make changes to current assessment programs in order to align assessments and reporting with the overall intent of the directions proposed. Assessment and reporting will need to be more deeply explored in subsequent consultations once the curriculum is more fully developed and graduation requirements have been identified. To initiate this process, advisory groups on provincial assessment will be formed in the near future.

Applying the Principles and Design Elements

With the guiding principles and key design elements in hand, Ministry staff invited groups of educators and academics to explore and experiment with curriculum design. In the summer and fall of 2012, teams of educators and academics met to provide advice to the Ministry of Education on the proposed structure and content of the new provincial curriculum in a number of subject areas. The teams experimented with new directions for their discipline and different structures for organizing curriculum documents in their subject areas.

The teams discussed a conceptualization for each area of learning and identified goals, rationale, and skills and competencies for the subject. As well, they identified potential areas of focus and topics for each grade level. Teams used this initial work to develop sample big ideas and learning standards for Grades 2, 4, 7 and 10. The following summaries describe the activities for each area of learning.

Arts Education

The groups working on Arts Education had several challenges to consider. Central to the discussion was how to address the manageability of four curriculum documents (dance, drama, music, and visual arts), particularly in grades K-5. Another issue was how to make the curriculum more accessible to generalist teachers and reduce the number of learning outcomes. The group agreed that the First People's Principles of Learning should be embedded throughout the Arts Education curriculum and consideration should be given to media arts as a separate area within Arts Education. At the senior grade levels, the group agreed that each of the areas of Arts Education should be represented independently to allow students to specialize.

Some of the challenges requiring consideration include: how to differentiate between curricular content that may be discrete to a grade level, and that which may be shared by multiple grades at different levels of sophistication; whether integrating the various areas of Arts Education is feasible at the elementary level; and whether grade clustering for the curriculum might be a viable option for younger grades.

Language Arts

The groups working on English Language Arts had several challenges to attend to as they experimented with possible curricular designs. An initial meeting identified aspects of language arts that overlapped with the cross-curricular competency of Communication. The groups also grappled with the unique aspect of language arts where learning outcomes are mostly process-oriented, with little specific content.

In the discussions, the group identified as highly important strong language and literacy skills and the fostering of a love of language and literature.

Following initial discussions regarding the cross-curricular competency of Communication, further curriculum development work will take place with educators who are involved with Français langue première. As for Français langue seconde immersion, development work will begin in February, 2013.

Mathematics

The working group on Mathematics focused on providing an overview of current Ministry directions, an outline of the implementation of the Western and Northern Canadian Protocol (WNCP) curriculum and a summary of mathematics curriculum from various national and international jurisdictions.

The following are some of the main ideas presented by the group:

- Building deep understanding in mathematics is critical to the development of the proposed cross-curricular competencies.
- This is the opportunity to build into the curriculum a sense of wonder, excitement and authentic appreciation for thinking mathematically.
- Mathematical understanding leads to both personal empowerment and global citizenry.
- Curriculum needs to have more clarity with reduced outcomes.

Science

The science group explored several potential changes to the science curriculum. The group identified the importance of science education in developing scientific literacy and the need to emphasize creativity and collaboration in science education. With a focus on K-10 Science, they explored possible ways to structure science curricula to encourage more creative and critical thinking. The group discussed the importance of integrating key concepts into future curriculum. Giving attention to key concepts would guide the development of big ideas and higher level learning standards, leading to more inquiry-based approaches. The science group also grappled with ways to balance the content and processes of science.

Social Studies

The Social Studies educators and academics emphasized the importance of engaging students in deeper thinking and the development of the historical and geographical thinking concepts. The group proposed using history and geography as the key disciplinary ways of knowing. This is consistent with a number of other jurisdictions in Canada and elsewhere. However, economics, political science, anthropology and sociology will continue to play a role in social studies. The balance and approach to these areas are still under review.

Building understanding through disciplinary thinking allows students to develop not only their understanding of the content being taught, but also their understanding of the higher-order thinking skills used by historians and geographers. The group suggested developing historical and geographical ways of knowing through the conceptual framework developed by the Historical Thinking Project. This approach to teaching aims to develop student's understanding of key concepts such as identifying change and continuity, analyzing cause and consequence, and establishing historical significance. This viewpoint will be the starting point for moving forward.

Health and Career Education and Physical Education

Ministry curriculum staff met with a small group of educators and academics to discuss the current state of health, career, and physical education curricula, cross-jurisdictional trends, and possible new directions and future options for these curricular areas.

Globally, many jurisdictions are re-conceptualizing their Health and Physical Education curricula, integrating the two into one comprehensive area of study with an emphasis on health and physical literacy. Other trends include introducing more flexibility and the updating of curriculum to support active healthy lifestyles. As it stands now, the working group stated that Daily Physical Activity (DPA) is cumbersome and is not always managed in a relevant way. The group suggested eliminating the reporting component of the DPA and focusing on developing student self-motivation to be physically active.

Career Education, which currently resides within the Health Education Curriculum, is a topic that is applicable to a variety of subject areas and includes several cross-curriculum competencies, including personal responsibility and social responsibility. The working group proposed a new direction for career education, where it could be integrated into subject areas in the early grades and then as a standalone subject area (similar to Planning 10) during the secondary, graduation transition years.

Other Curricular Areas

Further work will be undertaken in 2013 in a number of other areas of learning such as Language Learning (including Aboriginal Languages and Second Languages) and Applied Skills.

Conclusions

The common threads running through all summer and fall discussions included the need to foster love and joy in learning and to highlight the value of cultural diversity in society. The guiding principles for the development of new provincial curricula were evident in the groups' draft prototypes, goals, and rationales. All groups stressed the importance of inquiry, literacy and creativity in their proposals.

However, many of the draft prototypes had features that were written and interpreted differently from subject to subject. This is understandable given the unique nature of each area of learning. However, some of these subject area differences were seen as a potential barrier for planning cross-curricular units and activities. The unique nature of curriculum areas and the ability to use curriculum flexibly are both important. There was a need to find a common approach that applies to all curricula. The element that applies to all curricula equally is that they all describe what students are expected to know, understand and be able to do. This provided the basis for a new model for curriculum, which will be used as a starting point in the next phase of development.

A Proposed Model for Future Curriculum

Building on the initial work from these teams of educators and academics, the various models were reviewed by curriculum consultants and Ministry staff. During this review, the key elements from the different prototypes were reviewed and synthesized into one overall model for curriculum documents in all subject areas. This new model provides a common set of elements, along with a common set of definitions for each of these elements.

The key elements in this new model are:

- **Enduring Understandings** are statements of big ideas that are transferable to different contexts. They are generalizations based on two or more important concepts stated in a relationship within a subject or area of learning. In this model, enduring understandings are suggestions that teachers can use to organize instruction, as a basis to develop their own big ideas, or to combine with big ideas from other subject areas to develop integrated units.
- **Learning Standards** are explicit statements of what students are expected to know, understand and be able to do in a particular grade. Learning standards consist of two categories:
 - **Curricular Competencies** are the processes and skills that students need to develop the understandings and content within subjects or areas of learning. These statements begin with verbs.
 - **Content** is the core knowledge (facts and concepts) essential to the development of enduring understandings in a subject or area of learning. At this point, content learning standards do not use verbs, giving teachers flexibility in how they will teach the content.
- **Cross-Curricular Competencies** – provides a description of the competency as it relates to an area of learning, the competency continua, and student samples. In the future, these links will provide definitions, developmental continua and student samples.
- **Implementation Links** – provide additional information (written, visual, audio-visual) to clarify and support the curriculum (e.g., curriculum goals and rationale, self-assessment for students, demonstrations of learning, inquiries, and learning resources). Discussion of what would be the most appropriate links will take place in consultation with educators. Feedback and comments are welcome on what to include in implementation links.

Following are draft prototypes of several different subject areas all using the new curriculum model. The prototypes contain draft learning standards that are meant to illustrate how the curriculum could focus on building knowledge, skills and understanding, promote deeper learning, and allow flexibility for teachers to approach topics in ways that best meet the needs of their students.

The following are not new curricula, but simply models for use in this review and consultation process. Since these materials are to be used only for review and consultation purposes, they have not been professionally copyedited or formatted.

Proposed Design: Arts Education 4 – DRAFT

Cross-Curricular Competencies				
Thinking Competency *Critical *Creative *Reflective	Communication Competency *Language and Symbols *Digital Literacy	Personal and Social Competency *Personal Identity *Personal Awareness/Responsibility *Social Awareness/Responsibility		
Learning Standards				
Curricular Competencies <i>Students will be able to:</i>		Content <i>Students will know and understand:</i>		
<ul style="list-style-type: none"> • Engage as a participant/performer and an audience member • Collaborate with others to create artistic forms • Use elements/techniques of the arts to imagine, explore and create • Analyze artistic samples and presentations using set and developed criteria <ul style="list-style-type: none"> ○ Respond to work of others ○ Reflect on work of self • Analyze and argue ethics for copying and appropriating artistic works • Contribute to a safe environment to support creative risk-taking • Synthesize ideas into a variety or combination of art forms 		<ul style="list-style-type: none"> • Each of the arts has content that is specific to that art form <ul style="list-style-type: none"> ○ Dance: time, space, energy, weight, body, movement ○ Drama: setting, characters, plot, theme, style ○ Media arts: light, sound, point-of-view, narrative, editing ○ Music: rhythm, melody, dynamics, tempo, articulation, timbre ○ Visual arts: line, shape, tone, colour, form, space • Content and language can connect across the art forms • Each culture’s conception of art can vary drastically 		
Enduring Understandings				
Identity, place and culture can be expressed through a variety of creative forms	Works of art express ideas, feelings, and perspectives using the language of the various art disciplines	Engagement within the Arts enables the exploration of ideas through play	Creative processes can be used to communicate ideas and express emotions	
Implementation Links				
K-12 Arts Education (Goals and Rationale)	Assessment	Demonstrations of Learning	Instructional Support (Inquiries; integration)	Learning Resources

Proposed Design: Socials Studies 4 – DRAFT

Cross-Curricular Competencies	
Thinking Competency *Critical *Creative *Reflective	Communication Competency *Language and Symbols *Digital Literacy
Personal and Social Competency *Personal Identity *Personal Awareness/Responsibility *Social Awareness/Responsibility	
Learning Standards	
Curricular Competencies <i>Students will be able to:</i>	Content <i>Students will know and understand:</i>
<ul style="list-style-type: none"> • Select, evaluate, organize, reference, and analyze relevant sources of information (information processing) • Apply appropriate historical and geographical thinking concepts, including: <ul style="list-style-type: none"> ○ analyze and use primary and secondary sources as evidence to answer questions ○ explain the significance of particular people, places, events and developments, and place them within a spatial and chronological framework ○ recognize and explain patterns of change and continuity ○ determine the causes and consequences of key events and decisions ○ evaluate actions of people in the past, recognizing the historical and ethical contexts and standards at that time ○ develop an awareness of how different social, cultural, environmental, intellectual, and emotional contexts shape peoples' lives and actions 	<ul style="list-style-type: none"> • cultural and societal elements of various Aboriginal societies in BC and Canada, including local First Nations groups • cooperation and resistance between Aboriginal societies and European explorers and settlers • Aboriginal peoples' relationship with the land and use of natural resources • Location of key geographic features, Aboriginal groups studied, and European exploration routes • Indigenous economic systems and technological developments • trade between Aboriginal societies and with European explorers and settlers • systems of authority and governance in both pre- and post-contact Aboriginal societies • effect of colonialism on Aboriginal self-government
Enduring Understandings	
Interactions between cultures lead to social, economic and political change	Geography, climate and natural resources shape the development of societies
Societies develop economic systems to produce, distribute, and consume goods and services	Traditional beliefs and values shape the governance of a society
Implementation Links	
K-12 Social Studies (Goals and Rationale)	Assessment
Demonstrations of Learning	Instructional Support (Inquiries; integration)
Learning Resources	

Proposed Design: Science 7 – DRAFT

Cross-Curricular Competencies		
Thinking Competency *Critical *Creative *Reflective	Communication Competency *Language and Symbols *Digital Literacy	Personal and Social Competency *Personal Identity *Personal Awareness/Responsibility *Social Awareness/Responsibility

Learning Standards	
Curricular Competencies <i>Students will be able to:</i>	Content <i>Students will know and understand:</i>
<p>Inquire</p> <ul style="list-style-type: none"> explore essential understandings (e.g., how to build a self-sustaining ecosystem, how the Earth’s processes can be harnessed into alternative energy) make predictions, supported by reasons and relevant to the content (e.g., the effect of overfishing on ocean ecosystems) <p>Reason</p> <ul style="list-style-type: none"> use data from investigations to recognize patterns and relationships and reach conclusions (e.g., orbital electrons and reactivity) identify variables that can be changed in an experiment (e.g., amount, material, temperature) evaluate the fairness of a given experiment describe the steps in designing an experiment test hypotheses by designing and conducting experiments that control for two or more variables (e.g., with solutions and mixtures). <p>Apply</p> <ul style="list-style-type: none"> apply solutions to a technical problem (e.g., water flow and erosion) create models that help to explain scientific concepts and hypotheses (e.g., solids, liquids, gases). 	<ul style="list-style-type: none"> Living and non-living things interact within an ecosystem Habitats provide basic needs for living things Activities (e.g., agriculture, forestry, fisheries, development) can alter ecosystems. Wind, water and ice effect the surface of the Earth Weathering, erosion, and deposition are examples of change over time Natural and human processes contribute to the breakdown, transportation and accumulation of materials. The properties of matter are observable and measurable (e.g., colour, state, density, melting point) Physical and chemical changes affect the properties of matter The particle theory can be used to explain the properties of elements, compounds, and mixtures

Enduring Understandings		
Ecosystems support all life, including humans	The physical features of the earth’s surface are in a constant state of dynamic change	All matter is made up of particles which interact with each other
Human activities impact ecosystems	Weathering, erosion and deposition as well as human activities work together to wear down and build up the earth’s surface	Attributes of each particle determine how they combine and interact with each other

Implementation Links				
K-12 Science (Goals and Rationale)	Assessment	Demonstrations of Learning	Instructional Support (Inquiries; integration)	Learning Resources

Proposed Design: English Language Arts 10 - DRAFT

Cross-Curricular Competencies				
Thinking Competency *Critical *Creative *Reflective	Communication Competency *Language and Symbols *Digital Literacy	Personal and Social Competency *Personal Identity *Personal Awareness/Responsibility *Social Awareness/Responsibility		
Learning Standards				
Curricular Competencies <i>Students will be able to:</i>			Content <i>Students will know and understand:</i>	
<ul style="list-style-type: none"> appreciate the universal importance of story within and among Aboriginal and other cultures identify and use a variety of reading strategies to increase comprehension analyze the accuracy, reliability and relevance of information recognize how people manipulate language for specific purposes synthesize ideas or information presented in a variety of media to increase understanding engage with ideas presented in a variety of media engage actively as listeners to make meaning use oral language to create meaning explore creative uses of language to express ideas and evoke emotion, with artistry and precision develop and defend a position successfully adjust point of view, voice, tone and style for a variety of purposes assess and adjust communication to improve its effectiveness edit text with correct use of language conventions for clear and accurate communication 			<p>Genres: novels, short stories, graphic novels, plays (see LINK for clarification]</p> <p>Literary interpretation, analysis and evaluation: values, beliefs, assumption, perspectives, theories (see LINK for clarification]</p> <p>Literary elements and devices: characterization, mood, conflict, theme, point of view (see LINK for clarification]</p> <p>Language structures and features: paragraph structure, transitions, punctuation, style, tone, voice (see LINK for clarification]</p>	
Enduring Understandings				
People appreciate and find meaning in the artistry of language and literature.	People explore and express thoughts, feelings, and ideas to develop their understanding of self and others.	People respond to multiple types of text to create meaning in all aspects of life.	People create meaning through curiosity, inquiry and thoughtful reflection.	
Implementation Links				
K-12 Language Arts (Goals and Rationale)	Assessment	Demonstrations of Learning	Instructional Support (Inquiries; integration)	Learning Resources

Next Steps: Process for Developing New Curriculum

After this review is completed, revisions will be made to the model and the next phase of development will begin. To align with government priorities to be open and collaborative, the next phase of development will further broaden the involvement of educators in the field. Development will involve educators in various regions in the province. Ministry staff will coordinate, facilitate and provide support and guidance. More detail about these development processes will be forthcoming.

In January, the province will invite education stakeholders to be a part of a new Standing Committee on Provincial Curriculum. This Committee will enable dialogue with partner groups about the direction and implementation of new curricula. This Committee also will provide advice on assessment and other supports needed and will advise on the development of a process of continuous renewal of provincial curricula.

Also, directions from the graduation requirements consultation will provide guidance for curriculum design and development at the senior grades. Additionally, exploring options for grouping curriculum in the primary years will also be considered with the help of primary educators.

This winter, web-based interactive curriculum prototypes will be available for review. These will illustrate the potential of interactive web-based delivery of curriculum and classroom assessment. At this time, the province will gather advice about the kinds of support materials that educators would like to see added to assist them in implementing provincial curriculum.

Feedback

The prototypes in this document propose a model for British Columbia’s future curriculum. Your feedback will assist in the development of curricula that are more flexible, more empowering for educators, and more supportive of teaching higher-order thinking.

Questions

1. Please comment on the extent to which the prototypes meet the following principles:
 - Make curriculum more flexible to better enable teachers to innovate and personalize learning.
 - Reduce the prescriptive nature of current curricula while ensuring a solid focus on essential learning.
 - Focus new curricula on higher order learning, giving emphasis to the key concepts and enduring understandings (big ideas) that students need to succeed in their education and their lives.
 - Respect the inherent logic and unique nature of the disciplines while supporting efforts to develop cross-curricular units.
 - Integrate Aboriginal worldviews and knowledge.
2. To what extent could this curricular design enable the integration of curricula?
3. The use of curriculum organizers is still under discussion. Are curriculum organizers needed to provide shape to specific disciplines?
4. What types of support material should be included in the implementation links to support teachers in implementing new curricula?

More details about these development processes will be forthcoming. If you are interested in being a part of this work, have feedback on these questions or would like to share your thoughts on the ideas presented in this document, please contact the Ministry of Education at: curriculum@gov.bc.ca.